

Diseases	1966	1967	1968	1969	1970	1971	1972
1. Cholera ..	26	2	13	7	—	—	—
2. Smallpox ..	3	—	—	—	—	—	—
3. Plague ..	—	—	—	—	—	—	—
4. Malaria ..	—	—	—	3	—	—	—
5. Other fevers ..	811	640	819	664	904	826	754
6. Dysentery and diarrhoea ..	972	622	517	585	536	418	390
7. Respiratory diseases ..	478	493	502	244	283	250	290
8. Child birth ..	51	54	31	26	29	21	52
9. Other diseases	4,774	5,405	4,911	5,325	5,423	4,873	5,038

It is evident from the above table that 'other fevers' are responsible for a high mortality rate in the Territory. In other cases, the mortality rate is on the decline.

### III. Common diseases

#### *Communicable diseases :*

According to a study conducted in 1971, 31 per cent. of the deaths in the Territory were caused by communicable diseases. This probably is an under estimate, as many deaths due to infections might have been included under other categories. In India as a whole, 54 per cent. of total deaths are caused by communicable diseases, the leading causes being diarrhoea and dysentery followed by fevers. On the basis of morbidity in the general population, venereal diseases, diarrhoea in children, animal bites, tuberculosis, enteric fevers, dysentery (all forms), amoebic hepatitis, tetanus, infectious hepatitis and encephalitis are the 10 leading causes. On the basis of mortality

rates in the general population, diarrhoea in children, tuberculosis, tetanus, encephalitis, smallpox and dysentery (all forms) are the leading causes of deaths. On the basis of case fatality rate in hospital admissions, encephalitis, tetanus, poliomyelitis, smallpox, cholera and diarrhoea in children are the leading causes. A general health survey of two villages in Pondicherry region was carried out in 1967 with the object of studying the level of health of the people and the socio-economic factors that influenced it. The survey showed that the primary needs of the area were, "Improvement of nutritional status, control of communicable diseases like skin infections, eye infections, helminthic infections and leprosy, improvement of water supply and housing, prevention of soil pollution, reduction of the birth-rate and improvement in the general socio-economic condition". 37

Even before merger, cases of cholera, diphtheria, food poisoning, paratyphoid, fevers, plague, poliomyelitis, relapsing fever, smallpox, typhoid fevers, typhus and yellow fever were declared as notifiable diseases. After merger the following diseases were added to the list viz. cerebrospinal fever, chickenpox, dengue, diarrhoea, dysentery (amoebic and bacillary), elephantiasis, gastroenteritis, leprosy, puerperal sepsis, rabies, scarlet fever, virus encephalitis, and haemorrhage.

In 1906 primary smallpox vaccination was made compulsory in all the establishments. A valid certificate of vaccination against smallpox was a pre-requisite for school admission.

At present immunisation is carried out against smallpox, tuberculosis, diphtheria, whooping cough, tetanus and poliomyelitis at all hospitals and primary health centres. International inoculations and vaccinations are carried out at the **Bureau d'Hygiène**.

*Smallpox* : According to a study of the records pertaining to the period between 1905 and 1957 in the case of Pondicherry and between 1913 and 1953 in the case of other establishments, 33,402 deaths from smallpox were registered in the French establishments which worked out to an average of 650 deaths per annum. In other words, 6.7 per cent. of all deaths were due to smallpox. 38 In all 243 deaths occurred due to smallpox in rural areas, whereas only 20 deaths occurred in the urban area in 1957. Rural areas are more affected than urban areas. The children under 10 constituted the most vulnerable group. In 1957, the registered death-rate, due to smallpox of the children under ten was as much as 62.6 per cent.

On an average 475 cases with 263 deaths per annum occurred during 1958-61. During 1962-64, there were 123 cases with 88 deaths. The incidence of smallpox has been very negligible in recent years. The incidence increases in January and attains its peak in March-April in Pondicherry and Karaikal settlements; it attains its peak in March in Mahe and in December in Yanam region.<sup>39</sup>

Records in the Pondicherry Archives show that smallpox vaccination was carried out in Pondicherry as early as in 1804. Vaccination was however declared compulsory only in 1905. The vaccination was obligatory in the first year and re-vaccination in the eleventh and twenty-first year.<sup>40</sup>

A mobile unit was formed in the year 1935 under the direction of the Chief of **Bureau d'Hygiène** to intensify the vaccination campaign.<sup>41</sup> Capitaine Valle with the help of his mobile unit carried out 16,707 vaccinations in Pondicherry alone. The dry vaccine for the purpose was obtained from the **Institut de Vaccine Animale**, France. After merger, the Smallpox Eradication Programme was launched in this Territory on 1 May 1963. The programme was operated by the Tamil Nadu Government in Pondicherry and Karaikal regions and by the Government of Andhra Pradesh and the Government of Kerala in Yanam and Mahe regions respectively up to 29 February 1964.<sup>42</sup> Under this programme, 86.0 per cent. of the population were covered.<sup>43</sup> Since then no regular immunisation programme as such has been put into operation in the Territory although vaccination drives are carried out from time to time. Details of primary vaccinations and re-vaccinations carried out in the Territory since 1965 are furnished below :

Year	No. of primary vaccinations	Re-vaccinations
1965	13,315	62,538
1966	13,765	80,020
1967	10,038	40,405
1968	18,570	55,234
1969	16,992	49,996
1970	18,812	74,239
1971	20,304	71,242
1972	29,248	77,432
1973	24,608	71,857
1974	26,695	1,20,112

*Cholera* : It appears that even in the XIX century doctors here knew how to face the epidemic of cholera. In fact as early as in 1826, one of the native doctors in Pondicherry is reported to have been awarded a silver medal for services rendered in the struggle against cholera. The cholera incidence during 1906–1914 remained at a high epidemic level for nine years resulting in as many as 9,711 deaths. It was under these circumstances that the disease was declared notifiable in 1911. The years 1918, 1925 and 1931 also saw the outbreak of cholera taking a heavy toll of lives viz. 1,052 deaths in 1918, 1,068 in 1925 and 706 in 1931.

In 1935, the then French Administration carried out an intensive campaign of mass inoculation to control the disease. With the help of a mobile squad 28,349 inoculations were carried out in Pondicherry region and 3,846 in Karaikal. The vaccine used at that time was obtained from the Institute of Bacteriology, Guindy. The epidemic broke out again in 1942 and continued up to 1943 and declined in 1944 claiming in all 811 lives. In 1948 there were 352 deaths. It appeared again in 1950 and lasted up to 1951 with 1,017 deaths. The disease was in decline in 1952 with a few deaths followed by a rise in 1953 with 112 deaths. The territory was free from the epidemic during 1954–57. There were nine deaths between 1952–62. There was a severe outbreak in November 1963 with a death rate of 0.3 per 1,000 in Pondicherry and it lasted up to May 1964. The next outbreak occurred in November 1964 and continued up to February 1965.<sup>44</sup> The registered death rate for the Territory as a whole during the year 1966 was 0.7 per 1,000. The latest outbreak was reported in December 1973. In all 175 cases of gastro enteritis from various places in Pondicherry region and from Tamil Nadu were admitted in the General Hospital of which 13 cases proved positive of cholera.<sup>45</sup> It is evident that even though cholera continues to occur, its intensity, severity and magnitude have declined. Studies reveal that cholera epidemics occur at irregular intervals without any definite long term periodicity. The disease shows a double rise with a peak in December–March and a smaller peak in July–August during epidemic years. The incidence remains low in other months.<sup>46</sup>

A Cholera Control Programme was launched in 1973. It was manned by a Cholera Combat Team which functioned as a separate office.

*Malaria* : Malaria is known to have been recorded as 'fever with rigors' as early as in 1913 although it could not be ascertained whether these cases were diagnosed on the basis of finding the malarial parasite in the blood film or mostly on clinical grounds because laboratory services came into

existence only in 1926. It has been estimated that between 1913-52, on an average 2,232 cases were treated every year in the local hospitals out of which 10 per cent. were due to malaria (fever with rigors probably). According to the same study an average of 1,560 deaths per year were recorded during the period 1913-26 and nine during 1935-53. In 1931, 351 blood films were examined for the malarial parasite and 25 (7.1 per cent.) were found positive for plasmodium vivax infection. In 1939, 2,184 blood films were examined and only 19 (0.9 per cent.) were found to be positive. The same year morbidity due to malaria was 0.25 per cent. between January-September and 0.38 per cent. from October to December indicating that the maximum number of cases was registered in the last quarter of the year after the south-west monsoon. During the years 1935-53, on the average 108 cases and 27 deaths occurred per year in children below two years and 202 cases with 26 deaths in the age group 2-5 years. In the years 1959 and 1960, 198 and 100 deaths respectively were registered due to 'fever with rigors'.

A malaria survey was carried out in Pondicherry in the year 1961 and 5,750 children were examined for enlarged spleen, 274 blood films of infants and 2,917 for the other age groups were examined for malarial parasite and none was found to be positive. Hence, the study concluded that malaria is not a public health problem in Pondicherry region.<sup>47</sup>

The National Malaria Eradication Programme was launched in this Territory only during the III Plan period and the work was carried on by the Government of Tamil Nadu in Pondicherry and Karaikal regions and by the Government of Kerala in Mahe region.<sup>48</sup> The work was attended to by the Cuddalore Unit in Pondicherry region with a Sub-Unit in Pondicherry.

The National Malaria Eradication Programme in Pondicherry and Karaikal regions was taken over by this Administration from the Government of Tamil Nadu in March 1975. During 1975, 174 cases were reported which were all imported cases. As for Mahe region, the work was attended to by the Kerala Government. The Government of Andhra Pradesh implemented the programme in Yanam region.

Passive and active surveillance is carried out by the surveillance workers as well as by Basic Health Workers in the field.

*Enteric fever* : The disease is endemic in the area. An average of 160 cases was reported every year during the period 1963-67 in the hospitals in Pondicherry. In all 58.4 per cent. of the total cases occurred in the age group below 14 years and mostly in the age group of 5-9 years. The overall case fatality rate was 6.3 per cent. —the highest in the age group 45-64 and 1-4 years and lowest in infants. The disease is prevalent throughout the year with a rise in April and fall in January. According to the finding of a study carried out in 1971, T.A.B. inoculations of school children, factory workers and government servants helped in reducing the incidence of the disease. The report pointed out that the control of the enteric group of fevers needed control over water, sewage and food handling establishments, construction of latrine and personal hygiene. The survey report further emphasised the need for proper liaison between the hospitals and the 'Bureau d'Hygiène' for disinfection, inoculation and control of carriers to reduce the incidence of this disease.

*Ameobic hepatitis* : There appeared to be an upward trend in the incidence of this disease. The incidence was however low in children below 14 years and in females. Cases were admitted throughout the year without any special seasonal distribution. A reduction of the incidence of this disease called for complete treatment of amoebic dysentery cases and the same preventive measure as applicable to that disease.

*Dysentery (all forms)* : It is one of the major public health problems in the Territory. According to a recent study, cases were reported throughout the year with a maximum in January and a minimum in December with a slight rise in July and August.<sup>49</sup> It was pointed out that its incidence can be reduced through such measures as personal hygiene, pure water, provision of latrines, proper facilities for the disposal of night soil, control of fly nuisance, treatment of carriers and improvement of sanitary standards of eating establishments.

*Gastro-enteritis* : This is said to be one of the leading causes of morbidity and mortality in children especially below five years. The cases are admitted throughout the year, the maximum number of admissions being in August and the minimum in October. The admission is lowest in the last quarter of the year. The disease is caused partly due to infection and partly due to malnutrition. "The improvement of nutritional status, environmental sanitation, good personal hygiene and health education of mothers" was suggested to reduce the morbidity and mortality rate among children.

*Infective hepatitis* : This disease is known to be endemic especially in Pondicherry region. It is also estimated that there are almost 30 cases for each notified case. The lowest incidence is in infants and it starts rising in the age group of 1-4 years till it reaches its peak in the 25-44 age group. This disease is said to be responsible for high morbidity in young adults but high mortality in children. There are known to be two peak periods viz. June and December. The incidence of this disease seems to be on the increase. According to expert opinion, the control of this disease demands protected water supply, proper sewage disposal, provision of latrines, improved personal and food hygiene, sterilisation and regulations regarding blood transfusion. All these are linked with environmental sanitation and health education.

*Poliomyelitis* : Poliomyelitis is prevalent in Pondicherry region. The overall case fatality rate was 23.6 per cent. -the highest being in the age group of 5-14 years. Cases are known to be admitted throughout the year with the highest incidence recorded in the month of September followed by November-December and February-March. A survey carried out in the area covered by the Urban Health Centre run by JIPMER showed a post-polio paralysis rate of 0.8 per 1,000 population.

*Encephalitis* : The disease is locally known as '*Sani-Bada-Souram*'. Dr. Lapeysonnie, the first Principal of the upgraded Medical College in Pondicherry confirmed the first diagnosis of Japanese E. encephalitis in Pondicherry in 1955 by sending the sera of the suspected cases to Paris. The fatality rate of cases admitted was as high as 41.7 per cent. Children constituted more than half of the total cases. The incidence rate was found to be high in the month of June and low in December.<sup>50</sup> A large number of cases was recorded in the villages of Villiyanur Commune.

*Tuberculosis* : The prevalence of this disease is one of the major public health problems of the Territory. From the records available, it was learnt that since the year 1935, the disease had become more widespread specially in Mahe region. Poor living conditions and malnutrition were identified as the chief cause for the spread of the disease. The military personnel who had returned from France were also cited as a possible source for the spread of the disease.

Several measures were taken to control its spread. The hospital was provided with a microscopic apparatus (*appareil radioscopique*). A separate tuberculosis ward was opened in 1936 in the hospital and Dr. M.Z. André, who had undergone some specialised training at the Institute of Léon Bernard was placed in charge of the ward. It was since then insisted that all candidates selected for government service should undergo a severe medical examination. The police personnel and teaching staff were also required to undergo this examination.<sup>51</sup> In 1953, B.C.G. obtained from France was used for vaccination of school children, etc.

A T.B. Clinic was opened at Pondicherry in 1956. The staff of the clinic were sent to the National Tuberculosis Institute, Bangalore for training. The mass B.C.G. vaccination campaign launched in January 1959, to cover the entire territory ended in February 1961.<sup>52</sup> The campaign was then continued with special attention to the age group 1-15 years. In 1961, a tuberculosis survey was carried out among those who attended an exhibition and the students of French College by an initial screening and a follow-up at the T.B. Clinic. The survey showed that the prevalence rate was 19.6 per 1,000 among adults and four per 1,000 among school children.<sup>53</sup>

Among the childhood type of tuberculosis cases, majority were of tubercular meningitis with a high case fatality rate ranging between 30 per cent. and 68 per cent. According to the registration data for the year 1962, the Territory ranked as the fourth highest for tuberculosis mortality in India. The specific death rate for tuberculosis was 67.7 per 1,000 in the year 1966. The incidence of this disease among children seems to show a downward trend of late.

In 1963, a 110-bed T.B. Sanatorium with X-Ray and laboratory facilities was declared open at Gorimedu. Apart from this hospital, there are two Sub-Centres, one at Karaikal and another at Mahe, besides a number of Microscope Centres (sputum examination centres) located in the Primary Health Centres. The two Sub-Centres were provided with X-Ray and screening facilities. In 1964, with the assistance of the UNICEF and the Government of India, the National T.B. Control Programme was launched in the Territory. With its launching the notification of the disease improved, and in the year 1967 as many as 1,677 new cases were registered in Pondicherry with an incidence rate of 611 per 1,00,000 population. Altogether 18.2 per cent. of them were found to be infectious with positive symptoms. Up to March 1975 three rounds of B.C.G. vaccinations were given in the Territory. New borns are vaccinated as a matter of routine in the Maternity Hospitals.



The Tuberculosis Association formed in 1958 to render assistance to needy T.B. patients helped mainly to raise funds through the T.B. Seal Sale Campaign. T.B. workers' conferences were also held under its auspices from time to time.

*Respiratory diseases :* This included a large number of diseases including tuberculosis. Since 1959 this was the third leading cause of death in the territory. A study of morbidity in a slum area in Pondicherry Commune (Valakulam) was carried out in 1967 to identify the common diseases for which people sought treatment, the seasonal distribution of various diseases, etc.

The study revealed that the incidence of respiratory diseases was 120 per 1,000 population and that morbidity was highest among infants and children below four years. The highest incidence was reported between September-December every year. The children in the age group 1-4 years had concurrent and recurrent attacks of upper respiratory infection and pyodermas or upper respiratory infection with diarrhoea or a combination of all the three. An average of 467 cases due to respiratory diseases (excluding tuberculosis) was reported every year in the children's ward with an average case fatality rate of 8.4 per cent.<sup>54</sup> During the year 1971, the number of cases treated in the hospitals and dispensaries in the Territory was 6,274 out of which 250 cases were reported as fatal (i.e.) with a case fatality rate of 3.9 per cent. <sup>55</sup>

*Diphtheria :* Its incidence is reported mostly between July-September in the age group of 1-8 years. During 1964-67, an average of 18 cases were reported every year in the local hospital. Although this is not said to be a major health problem, immunisation of children with triple vaccine during infancy and a booster dose at the time of school entry is expected to lower the incidence of this disease still further.

*Whooping cough :* There are no reliable data about the disease as people do not normally seek treatment unless there are complications. An analysis of the records at the Rural Health Centre, Ramanathapuram in the year 1967 showed that the disease occurred throughout the year with a high incidence between February-April.

*Plague :* This does not pose a public health problem in the Territory. Except in 1960 and 1961 when ten and six deaths were reported respectively, there were no other reports of deaths.<sup>56</sup> In 1967 again six cases were reported to have been admitted in the local hospitals, but the patients belonged to a village near Mailam in Tamil Nadu.

*Leishmaniasis* : The disease was declared notifiable in 1935. An average of 12 cases were treated in the hospital during the years 1935-44. There was a sudden increase in the number of infected cases during 1946-47 following the return of a large number of soldiers from the Mediterranean and African countries after World War II.<sup>57</sup> There was a sudden spurt in the year 1951 although there is no proper explanation for it. The disease has almost disappeared from the area due to insecticidal spraying under the Malaria Eradication Programme.

*Filariasis* : This is one of the major public health problems in this Territory especially in Pondicherry region.

At the instance of the Malaria Institute of India, a filaria survey was conducted in Pondicherry between the fourth and twenty-sixth of March 1957 by a team from the Filariasis Training Centre, Ernakulam. The survey showed that, not even a single commune in this Territory was free from this infection. The highest incidence was in Pondicherry Commune (i.e. 7.8 per cent.) and the lowest in Tirubhuvanai (3.0 per cent.). The average infection rate was 3.9 per cent. in the outlying communes and 10.3 per cent. in Pondicherry town. The average incidence of disease manifestations for the whole of Pondicherry region was 4.7 per cent. including filarial fever and 3.8 per cent. excluding it. The average for the whole settlement was 4.7 per cent. Both in the town and in the various communes the incidence in males was slightly higher than in females i.e. 3.8 per cent. among females examined and 5.3 among males. It was seen that the disease rate progressively rose with the advance in age.<sup>58</sup>

The Filaria Survey Team recommended that proper control measures should be taken at the earliest and suggested the setting up of a Central Unit in Pondicherry region. Accordingly the National Filaria Control Programme was extended to this Territory in October 1961 and a Filaria Control Unit was set up in Pondicherry with a laboratory attached to it for carrying out entomological studies.<sup>59</sup> Twelve fixed and eight random Mosquito Catching Stations were put into operation in Pondicherry Commune. Another Filaria Control Unit was established at Karaikal in May 1971.

By 1972, the filarial incidence is reported to have dropped to 2.33 per cent. and the infection rate to 1.55 per cent. However a Crash Filaria Survey was carried out in Pondicherry in January 1972 covering a population of 5,466 and the microfilaria rate was found to be 6.93 per cent.<sup>60</sup> The same

year some vertical surveys were carried out in Pondicherry Commune among school-going children in the 5-15 age group. On the basis of the parasitological data it was reported that the infection rate was 6.87 per cent. and the average infestation was 9.45 per cent.<sup>61</sup> Yet another filaria survey was carried out in all the communes from 12 November 1973.

The Filaria Day Clinic attached to the General Hospital, Pondicherry is open on Mondays and Thursdays. A Filaria Night Clinic is run on Wednesdays from 8 p.m. to 12 mid-night at Lal Bahadur Shastri Street, Pondicherry.

From a study of various kinds of mosquitos in Pondicherry region, it was found that only in *C. fatigans* infection was found and this was identified as the insect vector of this disease in the area. The density of *C. fatigans* mosquito which transmits filaria is high throughout the year reaching its highest level in March and lowest in July. The infection rate is the highest in June and lowest in February.<sup>62</sup>

*Leprosy* : This disease poses a major health problem in the Territory. As it was not found feasible to wipe out the disease from the territory through suppression of the individuals, the then administration felt that the only possible solution was to establish an asylum where the victims could find all their requirements and shelter. Thus an asylum was established as early as in 1842 at the initiative of Desbassyns de Richemont, a former Governor of French India. The asylum was built about one to two km. south of Pondicherry, near the 'camp des Macouas'.<sup>63</sup>

The *arrêté* of 1 May 1880 imposed certain restrictions on the movement of lepers and provided for their compulsory treatment. The provisions of this order, although very ideal by themselves, were not properly enforced. The *arrêté* of 22 September 1924 was another progressive step which laid emphasis on prophylactic measures. Since then the lepers' asylum at Dubrayapet came to be called as 'Hospice prophylactique'.<sup>64</sup> In 1933 leprosy treatment was provided by all dispensaries. But in due course these dispensaries lost their popularity due to lack of interest.<sup>65</sup> The number of known leprosy cases in 1935 was 875 i.e. 499 in Karaikal, 334 in Pondicherry, 4 in Mahe and 38 in Chandernagore. This number did not include a large number of wandering cases. In 1948, a Leprosy Clinic (*Service de la Lèpre*) was opened in the General Hospital, Pondicherry.

On the recommendation of the Director, Leprosy Control Work, Government of India, Dr. Chatterjee of the Indian Council of Medical Research was appointed as Leprologist in 1958. He carried out a survey to find out the extent and severity of the disease in Pondicherry region.<sup>66</sup> An overall study incidence of 7.1 per cent was observed. On further detailed study of commu-  
nity-wise distribution, three different zones were demarcated as follows : <sup>67</sup>

Ozhukarai Commune	}	Area of high incidence (i. e. 9.2 per cent.)
Mannadipattu Commune		
Nettappakkam Commune		
Bahur Commune		
Pondicherry Commune	}	Area of medium incidence (i. e. 6.6 per cent.)
Mudaliyarpettai Commune		
Villiyannur Commune		
Ariyankuppam Commune		Area of low incidence (i.e. 4.6 per cent.).

On the advice of Dr. Chatterjee, a proposal was mooted for building a modern Leprosy Hospital in Pondicherry. This proposal however fell through, and in 1961 the establishment of a Leprosy Colony was under consultation with the Directorate General of Health Services. This proposal also did not materialise.

As part of the Leprosy Control Programme, a Leprosy Control Unit was sanctioned in 1964, with a complement of 20 para-medical workers. The Medical Officer in charge of the Leprosy Control Programme was sent for training at the School of Tropical Medicines, Calcutta. The para-medical workers were sent to the Central Leprosy Teaching and Research Institute at Chengalpattu for undergoing a six-month training course on leprosy treatment. On return their services were utilised to carry out a house-to-house investigation of leprosy cases and to arrange for their treatment.<sup>68</sup> Eight S. E. T. Centres were put into operation in 1965. The number increased to 20 subsequently. The S. E. T. Centres are located at the following places:

- |   |                        |
|---|------------------------|
| 1. Leprosy Central Unit, Pondicherry (West) | 6. Ariyankuppam        |
| 2. Leprosy Central Unit, Pondicherry (East) | 7. Villiyannur (Rural) |
| 3. Muttiyalupettai                          | 8. Villiyannur         |
| 4. General Hospital, Pondicherry            | 9. Reddiyarpalaiyam    |
| 5. Mudaliyarpettai                          | 10. Mettuppalaiyam     |
|   | 11. Bahur              |
|   | 12. Nettappakkam       |

- |                                 |                             |
|---------------------------------|-----------------------------|
| 13. Mannadipattu                | 17. Tirunallar              |
| 14. Katterikuppam               | 18. Nedungadu               |
| 15. General Hospital, Karaikal. | 19. General Hospital, Mahe  |
| 16. T.R. Pattinam               | 20. General Hospital, Yanam |

Following the establishment of the Leprosy Control Unit, surveys were conducted to study the incidence of the disease. Details of the surveys carried out and the number of cases detected and the different categories of cases since 1965 are given below :

Period	Total No. of persons examined	Total No. of leprosy cases	Lepro-matous	Neural	Border line
(1)	(2)	(3)	(4)	(5)	(6)
1965-67	.. 3,45,164	7,309	810	5,997	502
June 1969 to— 31 December 1971	.. 4,25,484	4,921	—	—	—
31 December 1972	.. 3,46,347	6,840	659	5,997	184
31 December 1973	.. 3,51,500	5,731	686	4,843	202
31 December 1974	.. 3,66,090	6,268	781	5,278	209

These surveys showed that not all cases detected had registered themselves for treatment and not all who registered themselves for treatment came to undergo treatment regularly. Studies showed that the incidence of the disease was on the increase in the Territory. A medical inspection carried out during 1969-70 showed that as many as 500 school-going children were affected by the Hansen disease—a definite index of the widespread nature of the disease and the magnitude of the threat faced by the younger generation in the Territory.<sup>69</sup> There is generally no restriction on cases of infection mixing with the non-infected. It also appears that the people in the area have a comparatively low resistance to the disease.

A Leprosy Clinic was opened on 31 August 1965 as an adjunct to the General Hospital, Karaikal. 'Voluntariat' a-social service organisation runs a Weaving and Spinning Centre for the rehabilitation of leprosy patients at Dubrayapet. A printing press was started on 27 July 1974 to provide jobs for cured patients as part of the rehabilitation programme. The Pondicherry Leprosy Welfare Association was formed in 1963 to work for the welfare of leprosy patients in the Territory.

*Venereal diseases* : The prevalence of venereal diseases in Pondicherry is attributed to the consumption of alcohol with its associated moral laxity. It is said to have assumed some special characteristics because of the frequent movements of the French Army personnel to overseas territories.<sup>70</sup>

Hospital records show a very high incidence of the disease in the Territory especially in the town. In the year 1935, the total number of persons affected by the disease was 2,897 and the number of in-patients was 192.

Up to 1959 only cases of syphilis, chancroid and gonorrhoea were diagnosed in Pondicherry. After 1960, diseases like lympho granuloma venerum, granuloma inguinale and non-specific urethritis have been diagnosed. Cases of neuro syphilis have also been recorded.

The table below gives the total number of cases treated in hospitals/dispensaries in the Territory between 1965-74: 71

Year	No. of cases	Year	No. of cases
1965	2,997	1970	7,565
1966	3,891	1971	3,632
1967	3,619	1972	12,283
1968	6,706	1973	11,049
1969	3,770	1974	14,334

A study of the trends in the prevalence of venereal diseases in Pondicherry during 1961-65 showed that syphilis was responsible for 37.03 per cent. of the total attendance, gonorrhoea for 17.42 per cent. and chancroid for 25.85 per cent. A significant fact was that chancroid which was the third leading

cause of attendance after gonorrhoea had moved to the second leading position. Males predominated over females in all these diseases. The incidence of granuloma was on the increase among males and females. The incidence of granuloma inguinale was very high in Pondicherry. Non-specific urethritis was responsible for 8.47 per cent. of all cases.<sup>72</sup>

There were no adequate facilities for the treatment of venereal diseases due to lack of specialists.<sup>73</sup> A separate V.D. Clinic was first started in the General Hospital in the year 1936.<sup>74</sup> Two medical officers worked in this clinic, one from 1935 to 1953 and another from 1953 to 1959. A Veneriologist was drafted from the Medical College, Pondicherry (now JIPMER) in the year 1959. V.D. Clinics have since then been opened as adjuncts to the General Hospitals in all the other regions.

On 1 December 1973 a V.D. Control Unit was established at the headquarters and the services of the officer in charge of the Control Unit was made available to all Primary Health Centres and Dispensaries in the region.

Although the Suppression of Immoral Traffic in Women and Girls Act was in force in the Territory, the tourist traffic, together with the absence of prohibition maintained the disease in the community. It has been pointed out that compulsory serological survey and mass treatment of pavement dwellers, rickshaw pullers and the population residing in vulnerable areas can help in reducing the reservoir of infection in the town. The villagers also seem to get their infection from the town.<sup>75</sup>

*Skin diseases :* Scabies with pyoderma is the leading cause for morbidity followed by pediculosis, pyoderma and fungal infections. A morbidity survey conducted in Valakulam, a slum area near Pondicherry in 1967 has led to the conclusion that pyoderma was the second leading cause for morbidity after bronchitis with a morbidity rate of 64 per 1,000 population. This is identified along with upper respiratory infections or diarrhoea or all three occurring concurrently in children. The highest morbidity is registered among the pre-school children (16.6 per cent.) followed by infants (13.6 per cent.) and school children 9.9 per cent). There is no seasonal distribution and the disease is prevalent throughout the year.<sup>76</sup>

A study of the cases recorded between 1935 and 1965 showed that the maximum number of cases was treated between 1938 and 1946 and the number started declining after 1950. There were no cases between 1959 and 1964, while only one case was diagnosed and treated in 1965. This is one of the diseases which had disappeared from the region with the liberal use of antibiotics.

**Eye diseases:** A study of the records pertaining to the year 1965 is reported to have showed maximum attendance due to conjunctivitis (20 per cent.) followed by Vitamin A deficiency (13.4 per cent.) and refractive errors. An ophthalmic morbidity survey carried out in a semi-urban community in Pondicherry revealed that the leading causes were: Vitamin A deficiency (8.5 per cent.), cataract (6.2 per cent.), infective eye diseases (3.3 per cent.), blindness (2.5 per cent.) and defective vision (1.8 per cent.). From a survey of creches and nurseries, it was found that among children below 5 years, eye symptoms due to Vitamin A deficiency was responsible in 4.8 per cent. of the cases and eye infection in 1.4 per cent. of the cases. The underlying cause seems to be widespread malnutrition.

Incidence of trachoma is reported to be very low in Pondicherry and is said to be prevalent only among Muslims. A specific glaucoma screening of a community above the age of 30 years showed a prevalence rate of 7.2 per cent. of proved glaucoma.

**Ruergal sepsis:** A recent study showed that on an average more than 130 such cases were being treated every year in the local hospitals. Many of these cases had their delivery conducted by indigenous midwives at home. It has been suggested that practical training of native midwives in scientific midwifery will help in reducing its incidence.

**Tetanus:** Its morbidity rate is high in the Territory. The persons mostly affected are villagers who do not take care of the wounds and who attend the hospital for treatment only on the apparition of trismus and contractions. The admission rate in the General Hospital due to tetanus ranged from 0.5 to 1.6 per cent. The admission for tetanus is high in August. The maximum number of admission occurred in the age groups 5-14 years (27 per cent.) followed by 25-44 years (16.7 per cent.) and below one year (16.7 per cent.). Females suffered more in the age group 25-44 years. In all 56 per cent. of the total cases occurred in children. The overall case fatality rate due to tetanus was 28.0 per cent. and was highest among infants.



*Helminthic diseases :* Helminthic infections due to hookworm, roundworm whipworm and thread worm are reported to be common in Pondicherry region. According to a study based on records from 1935 to 1951 more than 7,000 cases were treated every year for intestinal parasites in the General Hospital, Pondicherry alone. The consumption of beef and pork is said to be responsible for cases of tape worm. It appears that the general population does not seek treatment for these worms. Hence statistics collected from hospital records do not present a fair index of the prevalence of these diseases.

*Dracontiasis :* This is prevalent only in the villages of Kalapet and Pillaichavadi in Pondicherry region. It is believed that the disease had been present in those villages for nearly a century. In 1963 a house-to-house survey was conducted in Pillaichavadi. It was found that 1.3 per cent. of the population were infected. Young farmers and housewives especially those who looked after the cattle in the field were more prone to this disease.

*Animal bites :* This is said to be an important public health problem in Pondicherry region. An antirabies clinic was started in the year 1931. According to a study, as many as 12,555 cases were treated within a period of 31 years with 81 deaths. Its incidence started rising from 1949, doubled itself in 1955 and had increased five fold by 1967. The commonest animals involved were dogs (95.2 per cent.), cat (2.7 per cent.), monkeys (1.3 per cent.) and jackals (0.9 per cent.). An analysis of the geographical distribution of cases between 1958-62 showed that 50 per cent of the cases were from Pondicherry town and the rest from the rural areas in various communes.

*Rheumatic fever :* An analysis of records of two hospitals in Pondicherry region in 1967 showed that 62 cases were admitted for rheumatic fevers alone. The maximum number of cases were admitted in the 5 to 14 age group (58 per cent.) followed by the 15 to 24 age group (27.14 per cent.) and then by the 25 to 44 age group (14.5 per cent.). The cases are reported throughout the year with the maximum admissions in July, April and March.

#### *Non-communicable diseases :*

So far as non-communicable diseases are concerned, cardiovascular diseases, cancer, diabetes, mental illness, accidents and peptic ulcer are said to be the major health problems. It has been suggested that the organisation of mass screening programmes for their early detection as well as the education of the public for undergoing periodic preventive check-ups would be possible solutions to these problems.

*Cardiovascular diseases* : It has been determined through mass survey and from hospital records that rheumatic heart diseases (40.2 per cent. and 47 per cent.) hypertensive and atherosclerosis/coronary heart disease (35.3 per cent. and 12.5 per cent.) are the leading causes of cardiac morbidity. These two are responsible for 82 per cent. and 50 per cent. of the total cardiac morbidity. Aortic valvular diseases of rheumatic origin (8.9 per cent.), coronary heart diseases (5.6 per cent.), congenital heart diseases (5.2 per cent.) and rheumatic fever (4.7 per cent.) are the other important cardiac diseases.

*Cancer* : Cancer is a growing problem in the Territory. Cancer of the cheek, lymph-nodes, stomach, tongue and liver were the leading causes for admission. Cancer cheek is commoner among females (2:1).

*Diabetes* : According to a general survey carried out in 1965 among all the age groups above five years in Pondicherry town, the disease was observed in 0.7 per cent. of the surveyed population. The survey also detected 0.41 per cent. of new cases who were not themselves aware of their disease. The incidence was high in the age group of 30-69 years and in the higher income group. Except the diabetic clinic attached to JIPMER Hospital, there was no other institution to provide specialised treatment to diabetic patients in the Territory.

*Mental illness* : A mental morbidity survey of the general population of Pondicherry carried out in 1962-63 showed that the total gross neuropsychiatric illness was 9.5 per thousand population. Epilepsy accounted for 2.2, schizophrenia 1.5, alcoholism 3.6 and mental defect 0.7 per 1,000 population. The incidence of mentally defective children or neurologically disabled children was low due to their high early mortality. In an order dated 17 January 1956, the Chief Commissioner designated the '**Procureur de la République**' or the '**Juge de Paix**' of the Tribunal of first instance in Pondicherry and the Administrator of Karaikal as the authorities empowered to issue reception orders to the Superintendent of Government Mental Hospital, Madras for the admission of mental patients of this Territory, provided such a request was made to them, as the case may be, by the Superintendent of Police of Pondicherry or Karaikal. As for Mahe, its Administrator was authorised to issue such a reception order to the Superintendent, Government Medical Hospital, Kozhikode, at the request of the **Officier du Ministère Public** of Mahe. These officers were empowered to exercise the function of a Magistrate under the Indian Lunacy Act, 1912, although the Act was actually extended to this Territory only on 1 October 1963.<sup>79</sup>

*Alcoholism* : A general health survey of the population in the rural areas, during 1966-67 showed 13 per cent. of the population being addicted to alcohol. But prohibition has never been in force in this Territory and the drinking habit is accepted both socially and culturally.

*Peptic ulcer* : This is fairly common in Pondicherry region. The peptic ulcer admission rate of 1.8 per cent. is said to be the same as for South India and higher than those reported from other parts of India.<sup>80</sup> Manual labourers show a highly significant predilection for peptic ulcer.

#### IV. Public hospitals and dispensaries

A brief account of the medical institutions functioning in the Territory is given below :

*General Hospital, Pondicherry* : The growth of the hospital since 1853 up to 1954 has already been dealt with.

During the Second Plan period the hospital was equipped with the latest and better medical and surgical instruments. As the facilities at the hospital were not found adequate enough to meet the requirements, a new block with a capacity of 126 beds with separate wards for Medicine, Surgery and Paediatrics was constructed at a cost of Rs. 12.30 lakhs and declared open sometime during 1964-65.<sup>81</sup> A blood bank was also started in 1964.<sup>82</sup> The Diabetic Clinic went into operation in August 1973. The Leprosy Clinic started functioning from 31 August 1965. The new X-Ray plant was provided with an X-Ray block in 1969. The Filariasis Clinic was opened in November 1971. A separate clinic for psychiatric patients started functioning in the General Hospital with effect from 18 January 1974. By 1972, the bed strength of the General Hospital increased to 350 of which 80 were meant for females.<sup>83</sup>

As the main building of the General Hospital built more than a century ago had become too weak it was decided to demolish the structure and raise instead a five storeyed building. The foundation for the proposed new building was laid on 13 August 1973.

*Maternity Hospital, Pondicherry* : The facilities at the Maternity Hospital was also found inadequate to meet the growing needs of the population. As part of the first phase, a new maternity block accommodating 40 beds was constructed and occupied during 1964-65. During the Third Plan period, the