

CHAPTER XV

MEDICAL AND PUBLIC HEALTH SERVICES

The Ayurveda system was more popular in the early days in Kodagu. Old men, in Kodava houses used to extract oil from the roots, wooden chips and the barks of forest trees: they were also preparing astringent (*kashaya*) and powders to be used as medicines by patients. Metallic powders (*bhasma*) were also used as medicines. Spices like ginger, pepper and cardamom used as medicines by the tribals like Paleyas, Maleyas, Kudiyas, Betta Kurubas and Jenu Kurubnas. Cold, cough, bites, partial head-ache, diabetes, malaria etc, were treated by medicines prepared from herbs. In addition, they used to chant medicaments to the suffering. Villagers very much believed in such faith healing. Even to-day villagers do believe in such methods. Snake-bites were also treated. In one of the letters of Chikkavirarajendra, he mentions about the rural healers like Paleyaru and the Palace Hakeems and various kinds of medicines they had stock.

When Kodagu came under the administration of the British, the allopathic system gained coinage. As the British Army was stationed in Madikeri allopathic hospital was founded there. The Jail Hospital and District Hospital are the oldest medical institutions. The present District hospital at Madikeri was stated in 1863. In addition to the Government grant, public contributions were also collected for the maintenance of this hospital. The staff for medical services was borrowed from the Government of Madras.

During 1865-66, there were 233 in-patients and 3,666 out-patients who derived medical facilities from the Madikeri hospital. In 1875-76, the numbers went upto 311 in-patients and 8,692 out-patients. During these days, the death rate of in-patients was 41.32% and among them 32.81% died from malaria alone. Like other Malenad (hilly) areas, even in Kodagu, Malaria was a severe disease. In 1865, Rs.2056 was spent in Kodagu for medical services. During 1870, a hospital was

opened in Virajpet. There were four hospitals in Kodagu during that year; of these, three were at Madikeri and one at Virajpet. All these hospitals were under the control of the Regimental Medical Officer and he was called as Civil Surgeon. He was also the Superintendent of Madikeri Jail. Dr. J.P.Nash was the the first Regimental Medical Officer. The Zonal Deputy Surgeon-General of the Mysore Circle was in charge of Madikeri Army Medical Administration and was the superior officer over the Civil Surgeon. In 1875 the income of Madikeri and Virajpet hospitals was Rs.4,344. The Government grant was Rs.2,854 and Rs.1,029 was the contribution by the public. The Local Fund institutions (municipalities) contributed Rs.461. During that year Rs.4,460 was spent on these hospitals. The administration of the Deputy Surgeon-General of the Mysore Circle was found unnecessary as the Government of India withdrew the Army from Madikeri during 1882.

In 1904, the Government of India had sanctioned 1.75 lakhs of rupees for improvement of the hospitals in Kodagu. During 1907 it was decided that the post should be held by a Military Surgeon. It was in 1908, the hospitals of Madikeri and Virajpet were taken by the Government. However the other dispensaries were run by Local Fund institutions. Somvarpet and Kushalnagar dispensaries were opened during 1892 and 1893 respectively. The dispensary of Kushalnagar was shifted to Siddapur and another dispensary was opened in 1910. The dispensaries at Napoklu, Gonikoppal and Sunitkoppa were opened during 1888, 1890 and 1893 respectively. In 1912, the dispensary at Gonikoppal was converted into a hospital. Later, dispensaries were opened at Bhagamandala in 1910, at Murnad in 1930, at Balele in 1939 and at Tithimathi in 1949. Buildings were constructed to these by public contributions. The Beachbund Dispensary near Pollibetta and the Elk Hill dispensary near Siddapura were the private dispensaries and hospitals started earlier to 1925.

Besides there were also Rural dispensaries which would open once in a week. The Ayurvedic dispensaries run by the District Board at Bhagamandala, Hebbale and Kodlipet were handed over to Government in April, 1953. Consolidated Coffee Estate, Pollibetta and Cooverkolly Coffee estate of Somvarpet taluk were running dispensaries for their workers.

In the State of Kodagu, the Health Department was established in 1936 under the supervision of the Civil Surgeon. The Coorg Public Health Act I of 1943 was extended to the whole of Kodagu in 1943. During the decade 1940-50 nearly four and a half lakhs of rupees were spent on Public Health. As suggested by the Government of India in 1912, the Madikeri hospital was periodically inspected by the Surgeon-General of Madras until 1934. In 1937, the inspection was conducted by the Residency Surgeon, Bangalore. The Civil Surgeons of Coorg were Europeans belonging to the rank of Captains, until 15 April, 1949 and they headed the Coorg Medical and Public Health Departments. From 15 April 1949, the Public Health Department came under the Control of the Malaria Officer (who was appointed as early as 1946). More and more Indians were recruited after the Second World War. During 1953, the staff consisted of one Civil Surgeon, two Sub Assistant Surgeons, One Tuberculosis Officer, 18 Compounders, 36 Nurses and 38 Ward boys in the Medical Department. In the Public Health Department, there were one Health Officer (Malaria), one Assistant Health Officer, One Assistant Entomologist, 9 Malaria Inspectors, two Sanitary Inspectors, 8 Assistant Sanitary Inspectors, 5 Insect collectors and 16 others. From June 1960, the District Health Officer has control over all Primary Health Units and different medical institutions

like District Health Laboratory. The District Health Officer was made responsible for Anti-malaria, Leprosy and T.B. Programmes and various National Programmes like Family Planning, Women, Child Health, Immunisation, etc. He is also made to look after Sanitation during Festivals (Jatras), maintaining the statistics of Birth and Death, supply of medicines to Government Hospitals, to supervise hotels and cinema houses, to control the spread of epidemics and to advise the Local Bodies like Municipalities to maintain sanitation and in the formation of new extensions. Realising the importance of Family Planning, the designation of the District Health Officer was changed as the District Health and Family Planning Officer. Later, in 1978, the designation was changed to District Health and Family Welfare Officer and under him there are District Family Welfare Officer, District T.B. Officer, District Leprosy Officer, District Immunization Officer, Assistant District Health and Family Welfare Officer, Gazetted Assistant, two District Nursing Superintendents, one District Health Education Officer, three X-Ray Technicians, two Senior and Junior non-medical supervisors, four para-medical workers and 25 drivers; on the administrative side five Superintendents, three Statistical Assistants, 40 first and second division clerks, 11 Senior and Junior Stenographers and typists and 185 D group workers. In 1990, barring the three general hospitals, there were 48 Medical Officers, 3 Ayurvedic physicians, one Homeopathic physician, 21 men and 21 women Health Assistants, 86 men and 199 women Junior Health Assistants, 35 Pharmacists, 16 Health Educators, 29 Staff Nurses, five Senior and Junior Lab. Technicians, and three Health Visitors on the technical side. Earlier Madikeri District Hospital was having a Civil Surgeon. The Civil Surgeon of General Hospital Virajpet had control over the Somvarpet Hospital also. Now the Madikeri District Hospital is under the control of District Surgeon. Virajpet and Somvarpet General Hospitals are having Surgeons who work under the Joint Director of Health and Family Welfare, Mysore Division, Mysore.

The District Surgeon of Madikeri is looking after the administration of District Hospital, Madikeri. He also conducts post-mortem, countersigns medical certificates, issues physical fitness certificates and also conducts medical examinations.

In 1951, there were two General Hospitals at Madikeri and Virajpet. Somvarpet, Kushalnagar, Shanivarasante, Suntikoppa, Murnadu, Siddapura, Napoklu, Gonikoppal, Tithimathi, Balale and Srimangala were having District Board Hospitals and dispensaries. Bhagamandala, Hebbale and Kodlipet were having Ayurvedic dispensaries and Sampanje, Kanur and Hudikeri had Bi-weekly dispensaries. Nanjarayapattana, Valnur, Tyagattur, Herur, Chettalli, Ammatti, Madapur, Cheyyadane, Kutta, Kakkabbe, Nelaji, Karugunda and Birunani were having weekly dispensaries. Under the Five Year Plans, the district came to have a number of health programmes. In April 1953, all the District Board hospitals were taken over by the Government. After the States Reorganisation in 1956, Kodagu became a district and in 1957, there were 40 medical institutions in the district. Among them 22 were hospitals and 18 dispensaries. Out of these 40 institutions, 35 were in rural areas and five were in urban areas. During that year every institution on an average covered 39.7 sq. mile area and provided health and medical facilities to 5,785 people. The total number of beds was 768. During that year 35,804 in-patients (865.4 daily average) and 6,73,723 out-patients (2857.1 daily average) availed treatment. By 1965, in Kodagu, there were, one District Hospital at Madikeri and General Hospitals at Virajpet and Somvarpet and Civil Hospitals at Bhagamandala, Sampaje, Murnadu, Chettali, Satalli, Shanivarasante, Kodlipet, Madapura, Kushalnagar, Marenadu, Pollibetta, Gonikoppal, Balele, Tithimathi, Siddapur and Sreemangala.

There were a Group Hospital at Kutta, and Forest dispensaries at Kallahalli and Murnadu; bi-weekly dispensaries at Kadanga, Nanjarayapattana, Srimangala and Ammathi and weekly dispensaries at Karugunda, Kakkabbe and Peraje; a mobile health unit at Kallahalla. At Suntikoppa, Napoklu, and Hudikeri Primary Health Centres of Government of India were working. Civil Dispensaries were working at Kanuru and Hebbale and a dispensary at Kudagi.

In 1976, there were 46 government hospitals and Primary Health Centres/Units in the district. Among them, 26 were hospitals, three Primary Health Centres, one medical sub-centre, two Civil Hospitals, 13 Government dispensaries and one other institution. The total numbers of beds was 1,295 (Rural 300 - Urban 995). In Kodagu district during 1990, there were one District Hospital, two General hospitals, 15 Primary Health Centres, 10 Primary Health Units, two Community Health Centres, three Ayurvedic dispensaries, one homeopathy clinic and two mobile health units for the Scheduled Tribes maintained by the State Government. In addition to these at Madikeri, Ammathi and Pollibetta, there were private hospitals. Private Nursing Homes are becoming popular in urban areas like Madikeri, Virajpet, Gonikoppal, Kushalnagar and Somvarpet. Private clinics are also found in good number.

Vital Statistics

Keeping of birth and death statistics is no doubt a century old practice, but it is was not scientific in the early days. In early days village patels in villages and municipalities in the towns were recording the births and deaths in the rural and urban areas. Such statistics were sent to the Tahsildars every month; from there, it was sent to State's Centre which was in Madikeri. However to improve the registration system, rules were revised during 1915-16, of births and deaths, according to which the inspecting officers had to scrutinise the entries in the actual registers. New Regulations were introduced in 1918 based on Madras Law of 1899, according to which births and deaths had to be certified by Technical Officer after sample check-ups. Later, after Independence during 1969, the Registration of Births, Deaths and Marriages Act, was brought in to force. Under this Act it has been made obligatory that every birth or death should be registered in the Assistant Registrar's office of the area. Now the Village Accountant in the rural areas and the municipalities in the urban areas register births and deaths. According to the Act, the Deputy Commissioner of the District is the District Registrar and the District Statistical Officer is the Additional District Registrar of Births, Deaths and Marriages.

Sample Registration System

The Registrar General of India launched Sample Registration System with the aim of providing reliable annual estimates of vital rates of births and deaths. According to this system in selected places both in rural and urban areas statistics about births and deaths are collected on a current and continuous basis. The data so collected are subjected to Statistical analysis, to improve its validity and reliability. In addition to collecting the information, reasons for deaths is also collected so that the Public Health Programmes can be chalked out by it. Generally in certain selected places the school teachers are appointed as part-time enumerators. In the district, Kanthur, Murnadu of Madikeri taluk and Biligunda of Virajpet have been selected under Rural units of

Sample Registration System. In the table (table No. 1) below are given the total births and deaths in the district from 1941 to 1962 and from 1971 to 1986.

Table No. 1
Birth and Death figures in Kodagu

Year	Number of Births	Number of Deaths
1941	3,868	3,854
1942	3,297	3,847
1943	3,199	3,429
1944	3,093	3,459
1945	3,116	3,148
1946	3,220	2,646
1947	3,043	2,545
1948	3,237	2,119
1949	3,865	2,099
1950	3,846	1,673
1951	3,622	1,729
1952	3,896	1,876
1953	3,790	2,174
1954	4,196	1,871
1955	4,643	1,973
1956		Notavailable
1957	5,272	2,286
1958	5,496	2,690
1959	5,713	1,795
1960	3,163	1,189
1961	3,195	1,132
1962	3,383	1,385
1971	2,273	704
1972	3,384	1,228
1973	2,354	817
1974	1,346	404
1975	3,009	1,027
1976	3,621	1,262
1977	3,535	1,116
1978	3,801	997
1979	4,044	1,227
1980	3,982	281

Sample Registration System. In the table (table No. I) below are given the total births and deaths in the district from 1941 to 1962 and from 1971 to 1986.

Table No. I

Birth and Death figures in Kodagu

Year	Number of Births	Number of Deaths
1941	3,868	3,854
1942	3,297	3,847
1943	3,199	3,429
1944	3,093	3,459
1945	3,116	3,148
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1976	3,621	1,262
1977	3,535	1,116
1978	3,801	997
1979	4,044	1,227
1980	3,982	281

Year	Number of Births	Number of Deaths
1981	3,909	911
1982	3,774	969
1983	3,845	1,180
1984	6,689	1,412
1985	4,460	1,406
1986	5,037	1,204

The number of births in a year in a given area for every thousand mid-year population is called the Crude Birth Rate and the number of deaths per thousand mid-year population is called the Crude Death Rate. In the same manner, there are other factors like Infant Death Rate in Population studies. Still births, maternal deaths and other social health problems have their own causes. Therefore these factors act as indicators to Social health. The birth and death rates are estimated on regional level and as such are not available for individual districts. Therefore the Birth Rates and Death Rates for Karnataka State from 1971 to 1986 are given in the Table No.2 for rural and urban areas separately and also for the whole State.

Table No. 2

Annual Birth and Death Rates

Year	Birth Rates			Death Rates		
	Rural	Urban	Both	Rural	Urban	Both
1971	34.6	25.3	31.7	14.0	7.2	12.1
1972	32.8	28.0	31.5	14.3	8.7	12.8
1973	30.1	26.1	28.9	14.3	7.7	12.4
1974	29.5	24.3	28.0	12.4	7.0	10.8
1975	29.7	22.5	27.7	12.5	7.5	11.1
1976	31.1	25.2	29.4	13.4	7.7	11.7
1977	27.2	24.0	26.3	12.5	7.8	11.1
1978	30.2	26.4	29.2	13.6	8.2	12.0
1979	29.0	25.9	28.1	11.8	6.4	10.4
1980	28.9	24.4	27.6	10.7	6.6	9.6
1981	29.2	25.7	28.3	10.2	6.3	9.1
1982	28.8	25.7	27.9	10.2	6.3	9.2
1983	30.2	26.0	29.1	10.6	6.0	9.3
1984	30.9	28.5	30.3	10.7	6.6	9.6
1985	30.9	26.2	29.6	9.8	6.1	8.8
1986	29.9	26.8	29.0	9.4	6.8	8.7

In the Table given below (Table No. 3) are given the total number of still births, maternal deaths and infant deaths in Kodagu district from 1971 to 1986 together with the infant mortality rate for Karnataka State for the same period in rural and urban areas separately and for both. Infant mortality rates are not available for the district separately.

Table No. 3

Still Births, Maternal Deaths and Infant Deaths in Kodagu

Year	Kodagu District			Karnataka State - Infant Mortality rate		
	Still Births	Maternal deaths	Infant deaths	Rural	Urban	Both
1971	76	04	36	105	54	95
1972	154	19	66	102	68	95
1973	52	Nil	27	96	68	90
1974	25	Nil	20	98	52	86
1975	43	03	53	86	60	80
1976	82	04	62	99	60	89
1977	54	04	58	89	64	83
1978	23	04	44	90	58	82
1979	48	09	68	94	51	83
1980	37	07	21	79	45	71
1981	36	05	62	77	45	69
1982	09	05	69	71	47	65
1983	52	Nil	39	80	41	71
1984	44	04	42	84	43	74
1985	7	06	41	80	41	71
1986	61	03	20	82	47	73

Source: Registrar of Births, Deaths and Marriages, Bangalore.

EPIDEMICS

The people of Kodagu district have suffered much from Malaria. The earlier reports point out that 32% of deaths was mainly due to Malaria alone. People from neighbouring States were afraid of visiting Kodagu due to this. Tuberculosis like malaria was another disease of concern in the district. The programmes for eradication of malaria and other disease have improved the health of the people. Of late goitre has appeared in this district, specially in Madikeri taluk. During 1989-90 Brain fever was suspected and five death cases were reported in the district. A brief sketch of some of the epidemics is given here below.

Malaria

Malaria was the common fever in Kodagu district in early days. Malaria spreads by mosquitoes. According to Richter malaria had reached an alarming state during the summer of 1870. During the seventies, eighties and the nineties of the last century malaria had taken a heavy toll. It is reported that 2,500 to 3,000 people died of malaria every year. Packets containing five grains of quinine were sold in 22 post offices of the district during 1896. Until 1938 this system was continued. During 1903-04, 48,756 such packets were distributed. It was only in 1928 that regular anti-malaria campaign was started.

Major General Sri Garden Covell made a strong recommendation to the Government of India to establish a Malaria Unit in Kodagu. Accordingly, during 1947, a small unit to eradicate malaria was established. The whole of Kodagu was divided into eight circles. Each Circle had an Inspector under whom assistants were appointed. An amount of Rs.1.73 lakhs was sanctioned for the eradication work out of which Rs.5,000 was spent to establish a laboratory. The Government had spent Rs.6.63 lakhs from 1947-1952 for the eradication of this disease; Rs.5.47 lakhs being a grant from Government of India. From 1st October to 5th June every year when the disease was spreading, D.D.T. was sprayed in every house to destroy mosquitoes. By 1952 the Spleen Rate had come down to 5 per cent. Seventeen out of every 1000 were suffering from acute malaria. During 1953, the Government of India under National Malaria Control Programme sanctioned a small Malaria unit to supply D.D.T. This was one of the small unit of the 200 units established in the country. Earlier to 1947, 247 persons out of every 1000 were suffering from malaria. The ratio was reduced to 19. Spraying of D.D.T. was stopped from 1st July 1957. Under Surveillance programme, D.D.T. spraying was continued whenever the disease raised its head. This was carried on by 54 Surveillance workers for 15 days in a month under 14 Inspectors. In 1946, a post of Malaria Officer was created in the State and on 15th January 1949, the Public Health Department came under his control. Vaccinators were re-named as Sanitary Assistants. During the decade of 1940-50, the Government had spent Rs.4.5 lakhs over the Health Department. The Malaria Eradication Unit of Kodagu was divided into North and South Kodagu Units. The activities of these units included, entomological survey, laboratory work, D.D.T. spraying, anti-malaria treatment, etc., During 196-61, out of 13,425 fever cases, 12,670 blood examinations were undertaken and only 7 were found to have malaria in the district. When 342 children were examined for enlarged spleen, only 12 were found positive to Malaria. When the blood smears of 34,021 children were examined only two were found to be positive to the disease. In 1959-60, 148 - persons had taken treatment for malaria, whereas in 1960-61 there were only 22 malaria patients. By April 1964 the district entered into maintenance phase from consolidation phase. During 1989-90, 38 malaria cases were reported. Among these seven cases had come from outside the district. As a prophylactic measure 7,187 houses and 998 cattle sheds were disinfected and 3,077 blood smears were taken. During 199-91 only 9 malaria cases were reported from border villages of the district. Among them six had come from outside. During that year 50,137 samples of blood smears were taken and examined.

Tuberculosis

The programme for treatment of T.B. was introduced when Kodagu was a State. There was a Provincial T.B. Officer, looking after all the wards of T.B. of the province in 1952. In the beginning, separate T.B. wards were opened in Madikeri, Virajpet and Somvarpet. The Provincial T.B. Office was attached to Madikeri Civil Hospital and it was under the control of the District Surgeon. There were 37, 28 and 16 beds separately reserved for the T.B. patients at Madikeri, Virajpet and Somvarpet hospitals respectively. In 1953 B.C.G. Vaccination to prevent T.B. was introduced and by 1956, 28,259 students were examined and 19,245 were vaccinated. During the same period as many as 30,235 estate workers were examined, and 13,817 of them were inoculated with B.C.G. Vaccin. During the Second Five Year Plan, a T.B. Centre was sanctioned in Madikeri Civil Hospital. During 1960, there were 1,578 T.B. out-patients and 71 in-patients who availed treatment for T.B. in the district. During 1962 there were one Assistant Surgeon Grade I, one Assistant Surgeon of Grade 3, one Nurse, Two Compounders, one X-ray Technician, one Lab Technician and four peons in the Tuberculosis Unit. During 1989-90, 711 new tuberculosis patients were identified of which 613 were under treatment. In that year 4,306 sputum samples were examined and 138 were found to be affected by tuberculosis. From X-ray and screening it was found that 456 people had T.B. and 117 were having other types of T.B. B.C.G. Vaccination was administered to 13,177 people during 1990-91.

District T.B. Centre, Madikeri: The District T.B. Centre was started in 1967 at Madikeri. Here the T.B. patients are examined and medicines are distributed. A Medical Officer is the head of this Centre who is assisted by an Assistant Statistics Officer, two Laboratory Technicians and an X-ray Technician and other Assistants. The Medical Officer of Health is subordinate to the District Health and Family Welfare Officer, Kodagu district, Madikeri. In this centre, 381 patients were undergoing treatment in 1990-91. During that year 965 X-rays were taken and 3,674 samples of sputums were examined as against 4,064 sputums and 1,481 X-rays during 1989-90.

Small Pox

Small Pox was once a fatal disease in the district. In, 1865, vaccination was started against small pox in Kodagu. Kodagu was divided into three circles and two vaccinators were appointed on a pay of fifteen rupees a month. The number of people vaccinated during 1871-72 to 1875-76 was 952, 1,628, 1,810, 1,258 and 1,237 respectively. Twenty five people during 1870-71, 43 during 1871-72, 391 during 1872-73, 596 during 1873-74, 66 during 1874-75 died from small pox. The Vaccination Department was reorganised during 1879. By 1883, small pox vaccination was made compulsory and was introduced in towns. From 1888 to 1906, a Sanitary Board was functioning in the province. The Public Health Department and the Sanitary Board took up the work of vaccinating the rural people and school children. During 1952-56, 160 people were attacked by small pox of which 45 died. It is said that most of them were workers coming from outside the district. No death has been reported from small pox in the district since 1971.

Leprosy

Leprosy is not a dreadful disease in the district unlike malaria and tuberculosis. This disease was carried into the district by the outside Estate Workers. The district is non- endemic to leprosy. During April 1987, the Leprosy Control Programme was started in the district. Under National Leprosy Control Programme, a District Leprosy Officer is working under District Health and Family Welfare Officer. He is assisted by one Senior Para-Medical Supervisor, one Statistician, one Laboratory Technician, one Health Educator, one Junior Para-Medical Supervisor, and First and Second Division Assistants. There are S.E.T. Centres at Hebbale, Somvarpet, Napoklu and Hudikeri in the district. It is reported that there are no voluntary agencies engaged in leprosy control work. The number of patients detected, treated and cured in recent years according to the surveys conducted in the district are given in the following table (Table No. 4).

Table No 4
Details on Leprosy case in the District

Years	Cases in the beginning of the year	New cases detected	Cured	*Less	Present under treatment
1987-88	84	63	50	2	95
1988-89	95	30	33	1	91
1989-90	91	24	50	-	65
1990-91	65	18	17	17	49

*Death, Migration etc.

Plague

It is reported that Plague was very severe in South Kodagu during 1901-02. Dr. Bine was the then Civil Surgeon. Plague was wide spread and severe during 1902-05, in Virajpet and other places. The then Commissioner Davidson and P.L.Mekri rendered yeomen service in controlling the disease. During 1878- 1901, an operation camp was opened to control the disease. Plague disappeared with the spraying of D.D.T. to control malaria.

Cholera

The epidemic cholera is an old one. During 1989-90, 206 people suffered from gastro-enteritis and 21 of them died. It was found that three of them had died of cholefa. A total of 5,887 were inoculated for cholera and 23 samples of stools were tested.

In early days, people of Kodagu suffered from anaemia, influenza, skin diseases, amoebic dysentery, diseases of the eye, liver, etc. Table No. 5 show the causes deaths by some diseases in the district from 1971 to 1986 (as reported by the State Department of Economics and Statistics). (See pages 714-15)

HEALTH AND MEDICAL INSTITUTIONS

District Hospital, Madikeri

The District Hospital, Madikeri was started during 1863 near Market place as a single bed hospital. During that year 166 in-patients availed of treatment, and in 1874-75, 299 in-patients, 5,416 out-door patients had availed of treatment. During 1864, the Hospital was shifted to the present place. A Hospital Committee was set up to collect donations and to run the hospital. During 1883, 303 in-patients, 576 out-patients were treated, as against 5,100 persons in 1881. However the number of patients increased to 15,565 in 1886. But in 1900, the number of in-patients and out-patients decreased to 561 and 8,812 respectively. Earlier, the Government of Madras was providing medical staff. Till 1881, the hospital was under the control of the Regimental Medical Officer; it was handed over to Madikeri Municipality in 1883 and again was taken back by the Government in 1908. The hospital was extended and a compound was raised when a grant of Rs.1.75 lakhs was sanctioned by the Government of India in 1904. A new building was raised in 1907 by spending a sum of Rs.67,000 and the bed strength was increased to 70. In 1940, X-ray plant was installed. During 1951-52 the average number of out-patients was 152 and a total of 222 in-patients had received treatment. The number of beds was 251 in 1957. The post of the Assistant Surgeon was upgraded to the gazetted rank and was named as Superintendent.

The District Hospital was built stage by stages. In 1907, a new building was raised by spending Rs.67,000. In 1955 a special ward of five rooms was donated by the Late John Virad of Ranigod Estate of Siddapur. The present building of the hospital was completed in 1989 in the first phase of the three-phased programme.

In 1959, a Nursing School was started and was attached to the Civil Hospital. There were 20 trainees in the first batch and 10 in the second batch. The trainees were receiving a scholarship of Rs.80 each per month. Later this school was closed.

In 1960, a Pharmacists' Training Centre was started. In the first three batches 7, 10 and 6 persons were imparted training respectively and now the centre is closed. However a Junior Lady Health Assistant's training centre was started in 1960 and it continues to function even to-day. The intake was restricted to 20 trainees in the beginning, and was raised to 50 later, but at present it is restricted to 30 only. There were only one Sister- Tutor and a peon when the Training Centre was started. Now there are one Gazetted Principal, three Second Grade Nursing Superintendents, one Senior Health Inspector, one Nurse, three Senior Lady Health Assistants, one cook, one peon, sweeper and ayas.

During 1964, in the Civil Hospital, Madikeri there were 22 doctors, 26 nurses, 12 compounders, 20 mid-wives, four technicians, eight clerks, 101 'D' group workers. During 1963, 84,315 out-patients (daily average 231), and 61,695 in-patients (daily average 169) received treatment, and 119 major and 2,751 minor operations were performed in the Civil Hospital, Madikeri. During the year 1963-64, 22,445 laboratory tests were conducted; 1,275 T.B. (108 in-patients), 15 diabetic, 480 dental (in-patients), 403 ophthalmic (3 in-patients) 615 E.N.T. (36 in-patients) and 21 V.D. patients received treatment, and 566 X-rays were taken. At present (1991) the hospital has 410 beds and in 1990, 6,808 in-patients, 1,41,942 out-patients (old and new)

received treatment. 1,002 deliveries were conducted and 10,008 operations were performed, 4,826 X-rays and screening were taken. There were 207 T.B. patients under treatment. In 1990-91 under Family Welfare Services, eight vasectomy and 208 tubectomy operations were performed, 192 I.U.D. placements were made. In the same year under Women and Children Welfare Programme, 950 doses of D.P.T. were administered. There are General Surgery, General Medicine, E.N.T., Ophthalmology, Orthopaedics, Paediatrics, Skin and V.D. and Obstetric and Gynaecology units in the District Hospital, Madikeri. X-ray, Laboratory and blood bank facilities are also available in the Hospital. The District Surgeon is the administrative head of the hospital. Under him there are one Lady Assistant Surgeon, nine Medical Officer of Health (Grade I), 14 Assistant Surgeons, One Nursing Superintendent (Grade I), one Secretary and 216 other technical and office staff. There are separate Superintendents for the District Hospital and Women and Children Hospital. There is a Post-Partum Centre attached to hospital. There are two Assistant Medical Officers of Health and five other staff members in the Post-Partum Centre.

Women and Children's Hospital

The Women and Children's Hospital was started in Madikeri in 1956. Earlier, this was attached to the Civil Hospital. It was shifted to the present new building in 1958. There are 200 beds at present. The new building was constructed at a cost of Rs. three lakhs. There are seven special wards with a special Labour ward. There are 14 beds in these seven wards. Of these a special ward of four rooms was donated by Papaiah Naidu & Sons. A Special Ward of two rooms was built by A.C.Appaiah in memory of the late Dr. N.C.Appaiah in 1958. Another special ward of two rooms was got constructed by the Darian-Mercara Committee during 1959. Children's ward was built by C.M.Thimmaiah in 1958. There were one Assistant Surgeon, (Class I) Four Assistant Surgeons (Class II), One Nursing Superintendent (Grade II), 11 Nurses, 10 mid-wives, three Pharmacists and other administrative and technical staff in the Hospital during 1961. The daily average of out-patients during that year was 141 and in-patients was 71. Now there is a separate Medical Superintendent for this hospital. The present statistics of this hospital are included in the Statistics of the District Hospital.

General Hospital, Virajpet

The General Hospital, Virajpet was started during 1870 as a Dispensary. During 1884-75 twelve in-patients and 3,276 out-patients received treatments in this hospital. In 1878-79, 1,507 availed medical facilities. The records reveal that in 1880, 25 beds were made available for the patients and in that year 309 in-patients and 4,086 out-patients availed treatment. An operation theatre and the quarters for the Medical Officer were also built. The adjacent Christian mission building was purchased for Rs.4,000, for the use of the hospital. This hospital was handed over to Virajpet Municipality in 1883, but later in 1908 it was again taken back by the Government. In 1900, 873 in-patients and 10,602 out-patients received treatment. By spending 63,500 rupees a new building was constructed in 1908 to accommodate 56 in-patients. In 1950 X-Ray plant was installed. The post of the Assistant Surgeon was upgraded to the gazetted rank in 1953 and was renamed Superintendent. In 1959 a Mid-wife Training Centre was attached to this hospital, but later it was closed. There was a separate ward for T.B. patients and in 1963-64, 95 in-patients and

213 out-patients were treated. During that year there were 230 beds in the hospital, 75 members were on the hospital staff and Rs. 1,80,440 were spent on the hospital. In that year 5,446 in-patients and 55,986 out-patients received treatment; 2,233 dental cases were handled and 605 deliveries and 3,990 major and minor operations were performed.

At present there are 240 beds in the hospital. The special services include X-rays, unit, Blood Bank, Laboratory, Dental clinic and operation theatre. A post-partum centre is also attached to the hospital. The services of Ophthalmic and Cardiac specialists are also available. Occasionally cholera and gastroenteritis have been reported in areas coming under this hospital. Now (1990-91) this hospital is administered by a Surgeon, assisted by four Medical Officers of Health, four Assistant Medical Officers, one Dentist, one Medical Officer (Grade III), one Nursing Superintendent, 25 Nurses, 13 Lady Health Assistants, one Lab. Technician, one X-ray Technician, four Pharmacists, three clerks in the office and 28 other members of the staff. In 1989, 85,301 out-patients and 5,513 in-patients availed medical facilities; 932 deliveries were conducted, 161 major and 177 minor operations were performed 1,303 X-rays were taken and 794 screenings were made. There were 61 T.B. patients under treatment. Under Family Welfare Services, 3 vasectomy, 186 tubectomy, and 4 laproscopic operations were conducted. Under maternal and child health services 453 doses of D.P.T., 333 doses of D & T were administered to the children, 698 mothers and 450 children were administered T.T. and 453 children were administered oral Polio immunisation doses during that year.

General Hospital, Somvarpet

The General Hospital at Somvarpet was started as a 14 bed hospital in 1892. It was under District Board in the beginning but later in 1953 it was handed over to the government. This hospital was managed by an Assistant Surgeon who was under the Control of Civil Surgeon of Virajpet. However in 1956, he was given an independent charge by raising the post to the gazetted rank. Till 1968, the hospital was under the administrative control of District Surgeon, Madikeri. Later, it came under the control of the Divisional Joint Director of Health and Family Welfare services, Mysore Division. The buildings were built in a phased manner from 1951-1964. At present the bed strength is 120. A post-partum centre was started during Feb. 1983. There is an air-conditioned operation theatre. X-ray and Blood bank facilities are also available. A separate ward of 20 beds is kept for T.B. patients. It is reported that Gastro enteritis appears every year in the region coming under this hospital's jurisdiction.

During 1963, 478 in-patients and 39,535 out-patients received treatment, 15 major and 350 minor operations were performed, 363 deliveries were conducted, 35 T.B. in-patients, 498 Dental and 500 Ophthalmic patients were treated; 250 X-rays were taken and 625 urine and 200 stools samples were examined in this Hospital. Later in 1989, 1,11,980 out-patients, 34,493 in-patients received treatment, 530 deliveries were attended and 40 major and 176 minor operations were performed, 932 X-rays were taken and 456 screenings were made. During that year 123 T.B. and 9 Leprosy patients were under treatment. In 1989-90, under Family Welfare Services one Vasectomy, 175 Tubectomy operations were performed and 511 I.U.D. placements were made. Under Women and Children Health Programme 371 doses of D.P.T., 150 doses of D & T were

administered and T.T. was administered to 285 mothers and 85 children. Oral polio immunisation doses were administered to 371 children.

In 1991, apart from the staff of the post-partum Centre, there were 62 members on the staff of the Hospital. Among them there were one Surgeon, two Medical Officers of Health (Grade I), three Assistant Surgeons, one Nursing Superintendent, One Dentist, 12 Nurses and three Pharmacists. Apart from these, there were office clerks, Lab and X-Ray technicians, and other staff. In the post-partum centre, there were two Medical Officers, one Lady Health Visitor, three Health Assistants and a first division clerk.

District Health Laboratory

There is one District Health Laboratory in Madikeri and its present building was constructed in 1969. There is one Medical Officer who is assisted by four Senior Lab. Technicians, four Lab. Assistants, a peon and sanitary staff. This Laboratory is under the control of District Health and Family Welfare Officer, Madikeri. The Laboratory undertakes analysis and testing of the malaria parasites, stools and urine examination, blood examinations, etc. As there is no senior Lab. Technician at present only blood examination for malaria is done. In this laboratory, during 1990-91, 6,142 samples of urine test, 93 samples of stools test, 3,137 samples of blood counts, 1,012 E.S.R., 166 F.B.S., 121 P.P.B.S., 28 samples of blood urea, 77 V.D.R.L., 9 colestral tests and 3,269 malaria blood counts were done.

Ramakrishna Sevashrama Hospital, Ponnampet

The Ramakrishna Sevashrama Hospital was started in 1942 as a homeopathic dispensary at Ponnampet by Sree Ramakrishna Sharadasrama. Later in 1947, it was converted into an allopathic dispensary and in 1958 into a hospital. By 1947, this dispensary provided medical service to the people of 25 villages, around Ponnampet. In 1958, the building of the Hospital was constructed by spending Rs.75,000. This hospital has 30 beds at present. It has the facilities of X-ray, clinical laboratory, operation theatre, E.C.G. etc. and it arranges regular camps for the detection and treatment of Ophthalmic, Dental, E.N.T. and other diseases of children and other patients. Normally, people who suffer from typhoid, T.B. and dysentery and Diarrhea visit this hospital. There is a Resident Medical Officer in this Hospital and along with him there are one Paediatrician and one Surgeon who are assisted by six Lady Health Assistants, a nurse, one lady servant, Lab and X-ray Technicians (one each) and other staff. During 1989, 16,138 out-patients, 1,298 in-patients got their treatment, 28 deliveries were attended, 177 X-ray were taken and 9 Screenings were made in the Hospital. There were 10 T.B. patients under treatment. Oral Polio and D.P.T. are administered to 25-30 children every month in this Hospital. It is reported that labourers of Coffee Estate working in far off places like Birunani and Kutta receive treatment in this Hospital.

Aswini Hospital, Madikeri

The Aswini Hospital, Madikeri, was started in 1977 in Madikeri as a Project of the Vishwa Hindu Parishat, under the auspicious of the Sri Cauvery Krupa Vishwa Kalyana Seva Samithi. At present, it is a 40 beds hospital. Rs. 13 lakhs have been spent on the buildings so far. This hospital

has an out-patient unit and arranges free camps for the detection of diseases pertaining to eyes, teeth etc. It has a mobile dispensary which provides treatment in the backward rural areas also. The staff of the hospital from 1974-1977 had toured remote villages of the district and have provided medical facilities. The London Mission Trust has provided a Land Rover, a mobile unit to this Hospital for organising Health Camps. The R.D. Birla Trust of Bombay has extended grants for organising health camps. Typhoid, diarrhea, lung infections etc., are generally reported in the Hospital. This Hospital has conducted medical check-up camps for the tribals of Basavanahalli and Anekadu. From the studies, it is found that the tribals of these areas are suffering from night blindness due to Vitamin deficiencies and fat contents in their food and much of it is attributed to their drinking habits. It is further reported that the tribal people suffer from anaemia due to round and hookworms.

The Chief Superintendent of this hospital is assisted by Medical Officers, Surgeons, Lab. Technicians, Pharmacists, Nurses and Midwives etc., In 1990, 6,565 out-patients, 1,149 in-patients received treatment from this Hospital, 910 women and 1,405 persons received treatment in camps arranged for women and ophthalmic patients; 102 deliveries were attended in this Hospital, 4,321 major operations were conducted, 1,545 X-ray exposures were taken, 300 screening were made in the Hospital during 1990. During the same year 96 new T.B. and 200 old T.B. patients were under treatment. Under Family Welfare Programme one vasectomy, 13 tubectomy operations were performed and 61 I.U.D. placements were made. Under Maternal and Child Health Programme. 125 children and 134 mothers were administered D.P.T. and T.T. respectively.

Rural India Health Project Hospital, Ammathi

This Hospital was started in 1968 under the joint ownership of Rural Health India Project of Chicago and Amercian India Dispensary Trust, Ammathi to provide higher medical facilities for the rural population in and around Ammathi. In the beginning this was known as America-India Dispensary. The expenditure of this dispensary was borne by Chicago Rural Health India Project in the beginning but after 1971, Ammathi Trust has taken the responsibility. The Consolidated Coffee Limited (Pollibetta) Bombay-Burma Trading Corporation (Siddapur) Elkhill Estate, Coffee Board and some coffee planters are providing funds at present. In 1981 the Chicago Trust handed over the Hospital to the Local Trust. Quarters are provided to the staff by spending Rs. 22 lakhs in 1968. The Hospital has 57 beds of which 40 are kept open for the general public. In 1990, along with a Chief Medical Officer, there were four medical officers, six nurses, two para-medical workers, two pharmacists, three clerks and other staff. The Hospital is having a laboratory, full-fledged operation theatre, X-Ray Unit and Incubator facility. It is reported that more patients suffering from hook-worm, anaemia, diarrhea and dysentery and typhoid attend the hospital. As most of them are workers in coffee estates they come for treatment of soft tissue and bone injuries. During 1989, in this hospital, 11,755 out-patients, 1,371 in-patients received treatment; 81 deliveries were conducted, 641 operations were performed, 77- X-ray exposures and one screening were undertaken. There were 119 T.B. patients and four leprosy patients under treatment. In 1989-90, under Family Welfare Programme, 49 sterilizations were performed and nine I.U.D. placements made. Under Women and Children Health Programme, 171 doses of D.P.T and 350 doses of T.T. were administered, and 170 children were given oral polio drops.

C.C. Hospital, Pollibetta

Consolidated Coffee Estate Hospital in Pollibetta was started in 1952. There are 30 beds and this hospital provides medical facilities to the workers of coffee estates. There are 16 sub-centres attached to this hospital. There are two Medical Officers assisted by five Nurses and two Pharmacists in this hospital. There are one X-Ray unit and a laboratory having one technician for each. During 1989, in this hospital 11,250 out-patients and 410 in-patients received treatment, 120 deliveries were conducted, 850 X-Ray exposures were taken and five screening were made. In the same year 10 T.B. patients, one leprosy patient were under treatment. Under Family Welfare Programme, 67 operations were performed in 1989-90 and two I.U.D. placements made, and 440 doses of D.P.T. were administered under Women and Children Welfare Programme.

Sai Shankara Health Center, Ponnampet

Sai Shankara Health Centre was established in 1990 under the auspices of Prasanti Nilaya in Ponnampet. This Centre, is started for the purpose of providing medical facilities to the rural people. In addition to this, the centre tries to help the people to understand the basic knowledge of sanitation and health. In 1989, the hospital building was raised at a cost of 5.75 lakhs, to accommodate 18 in-door patients. At present, there is a Chief Medical Officer who is assisted by one Assistant Medical Officer, three Lady Health Assistants, one Clerk and one Ayah. There is a provision to treat only out-patients at present, and in the near future provision will be made to treat the in-patients also.

Community Health Center

Community Health Centers are opened at Taluk Centers and other places. Every such Center is opened for one lakh population or for four Primary Health Centers. Generally every such center will have 50 beds and they act as referral Hospitals, for the hospitals and dispensaries in the area and will have many medical specialists. In the district, Pollibetta and Shanivarasante have such centers. The table below (Table No. 6) gives some information about the Community Health Center at Pollibetta and Shanivarasanthe for the year 1989-90.

Table No. 6
Community Health Centers

	Pollibetta	Shanivarasanthe
Year of establishment	-	1942
Number of beds	52	30
Sub-centers	-	13
Out-patients treated	7,279	20,036
In-patients treated	36	960
Deliveries conducted	26	236

	Pollibetta	Shanivarasanthé
Operations performed	Nil	400
Vasectomy	Nil	Nil
Tubectomy	111	403
I.U.D.	51	192
D.P.T.	154	828
D & T	110	880
T.T. Mothers	70	960
T.T. Children	-	-
Polio vaccine	154	828
T.B. Patients treated	4	34
Leprosy patients treated	Nil	02
X-Ray	Nil	03

Earlier to 1989, the Community Health Center of Pollibetta, was only a Primary Health Unit. The facilities of X-ray, clinical laboratory, Dental treatment are available at Community Health Center, Pollibetta. There were four Medical Officers assisted by three Staff Nurses, two Pharmacists, Office Superintendent and First Division Clerk one each, three Second Division Clerks, Laboratory and X-ray technicians one each, Junior Lady Health Assistants and 20 other staff in 1989-90. It is reported that scabies, diarrhoea and dysentery, T.B., fever and anaemia are generally found in the locality. In 1989-90, in the Community Health Center at Shanivarasanthé there were two Medical Officer of Health, one Lady Medical Officer, one Dentist, three Staff Nurses, four Junior Health Assistants, 11 Junior Lady Health Assistants, one Lady Health Visitor, one Block Health Educator, one Senior Health Assistant, one Junior Technician, one X-ray Technician, one Pharmacist, one office Superintendent, one First Division Clerk, Typists, three Second Division clerks, 19 Group D workers and drivers on the staff.

Primary Health Centers

The Primary Health Centers were established to provide the basic medical services in the rural areas, to control epidemics, to promote general health and other preventive measures. The National and State Programmes like Eradication of Malaria, Control of T.B. and Leprosy Programmes, the Immunization programme, the Family Welfare Programme are effectively attended by these Centres. In rural areas they act as nuclei of health programmes. Earlier there were two types of health centers i.e., Government of India type and of Mysore model; but now they are called by only a single name. Government of India Primary Health Centers were established after 1957. In the district of Kodagu by 1960, Suntikoppa, Hudikeri and Napoklu were having Government of India type Primary Health Centers. Suntikoppa and Hudikeri centres were getting grants from UNICEF. In these Primary Health Centres, in the beginning there were one Medical Officer of health, four Nurses, one Staff Nurse or Lady health Visitor, one Pharmacist, one Junior Health supervisor, two servants. As the health programmes increased, the strength of staff and medical officers also increased. At present in every health centre at least there are two medical officers, one being a lady medical officer; and to assist them there are pharmacists, nurses, staff nurses, lady

health visitor, senior and junior health supervisors, lab.technicians, health instructor and multi-purpose health workers both male and female. During 1989-90, there were 15 primary health centres in the district. Generally every such centre caters to the health needs of about 30,000 people. Annually every P.H.C. is supplied with drugs worth Rs. 30,000. Napoklu, Hudikeri, Kutta, Balele, and Suntikoppa Primary Health Centers were having lady medical officers.

The Health Units of Chheyendane, Sampaje, Tithimathi, Marenadu and Kodlipet, were converted into Primary Health Centres in 1989. Napoklu Primary Health Centre was started as a dispensary in 1892 and later in 1964, it was converted into Government of India Type Health Centre. In this P.H.C., a maternity ward was opened in 1957, and in 1965 an operation theatre was started, and a ten bed ward was also built. The P.H.C. has an X-ray unit and the facilities are available for the treatment of ophthalmic diseases. Kutta Primary Health Centre was started as a Group Hospital in 1955. Later, in 1987 became a Health Centre for the Scheduled Tribes and in 1988 it was made a Primary Health Centre. The Bhagamandala Ayurvedic Dispensary was converted to Primary Health Centre in 1984. Now it was come under Tribal sub-plan and provides health and medical facilities to the Tribal people of the border areas of the district. During Tula Sankramana this centre arranges health exhibitions.

In 1989-90, 389 Health Guide Posts were sanctioned and of them 317 posts were filled-up. The number of Health Guides working in every Primary Centre was as follows; Napoklu 25, Bhagamandal 36, Murnadu 13, Shanivarasanthe 74, Hudikeri 34, Balele 32, Kutta 9, Shantalli 28 and Suntikoppa 66. The number of sub-centres which had buildings in 1989-90 were as follows: Kutta-5, Tithimathi-16, Bhagamandala-6, Santalli-11, Sampaje-6, Balele-8, Sreemangala-2, Murnadu-7, Marenadu-5, Hudikeri-12, Hebbale-4, Kodlipet-3, Shanivarasanthe-10, Napoklu-4, Chheyandane-2, Suntikoppa-8.

Some information of Primary Health Centres of Kodagu district are given in the Table No. 7 for the year 1989-90. (See pages 716-17)

Primary Health Units

The earlier Civil Hospitals, Dispensaries, Forest Dispensaries and Ayurvedic Dispensaries were renamed Primary Health Units by the Government in 1978. Homeopathic and Ayurvedic dispensaries were also called as Primary Health Units. These Units, like Primary Health Centres provide, both curative and preventive services, and also carry out the National and State Health programmes like Eradication of Malaria, Leprosy Control Programme etc. Generally these units offer medical and health facilities, to 15 to 20 thousand people. These Primary Health Units submit their monthly reports to the concerned Primary Health Centres. In these Primary Health Units, generally there will be a Medical Officer, who is assisted by a Staff Nurse, Pharmacists, Mid-wives and servants. In the bigger units, there will be a Lady Medical Officer and Maternity Wards. There are Lady Medical Officers in Siddapur, Gonikoppal and Madaput Primary Health Units. There will be a Medical Officer, a Pharmacist and a servant in Primary Health Units which were earlier Medical sub-centres. In 1989-90, there were 16 PHUs in the district including Ayurvedic, Homeopathic and Mobile Units. The Department was providing them annually Rs.2,000 worth drugs per unit. However, the bigger units like the PHUs at Gonikoppal, Kushalnagar and Siddapur

were receiving higher amounts. A new building is built at Kushalnagar and it is likely to be converted into a general hospital. The units of Kushalnagar, Gonikoppal and Siddapur are some of the older dispensaries.

Karikeri, Ballamavati and Arapattu of Madikeri taluk have Ayurvedic dispensaries, and Parane has one Government Homeopathic dispensary. To provide medical facilities to the tribals in the interior parts of the forests, there are Mobile Tribal Units. There are two such units, one at Kallahalla and the other at Kushalnagar. The building of the Kallahalla Unit was built in 1960 and the Kushalnagar Unit has no building of its own.

In table No. 8 some information about the PHUs are given for the year 1989-90. (See pages 718-19)

The Community Health Centres, Primary Health Centres Units at Kutta, Hudikeri, Balele, Tithimathi, Gonikoppal, Pollibetta, Siddapura, Napoklu, Bhagamandala, Murnad, Ballamavati, Shanivarasanthe, Shantalli, Kodlipet, Gowdalli, Madapura, Kushalnagar and Chettalli had the tap water facility in 1989-90. The PHCs/PHUs at Sreemangala, Hudikeri, Ballamvati, Shanivarasanthe, Kodlipet, were having wells. However, Sreemangala and Hudikeri centres were not using the well-water. Murnad, Kanur, Kallahalli (mobile), Karikeri, Parane, Sirangala, Nanjarajapattana Primary Health Centres/Units were not having any taps or wells.

During 1989-90, food was supplied to the patients at Napoklu, Shanivarasanthe, Suntikoppa, Balele, Kutta, Murnad, Sreemangala, Gonikoppal, Siddapur, Tithimathi, Chheyandane, Sampaje, Chettali, Kushalnagar, Kodlipet and Madapura Centres/Units. During 1989-90, 23 PHCs and PHUs had refrigerators and deep freezers.

Generally, in the areas coming under the Health Centres/Units, Diarrhea and Dysentery, fever, cough, intestinal disorders, anaemia due to hook-worm etc., were reported. T.B. as a general epidemic was found to be reported from Kushalnagar and Pollibetta Centre/Unit.

Madikeri Jail Hospital was one of the older Medical institutions in the district. In 1961-62, 27 in-patients, 2,675 out-patients had received treatment in this hospital. As this hospital is now closed, the prisoners and the staff of the jail receive their medical treatment from District Hospital, Madikeri.

Mahadevapet dispensary is also one of the older dispensaries which was working under District Hospital. A Medical Officer from the District Hospital was usually deputed to this dispensary. Madikeri Municipality was paying Rs. 3,000 by way of contribution. The building of this dispensary was built by the donation offered by the Speaker of the erstwhile State Assembly of Kodagu, B.S. Kushalappa. In 1960, the daily average of the out-patients of this dispensary was 122.9. Now Mahadevapet dispensary comes under the control of Madikeri Municipality and a Junior Health Assistant is looking after the hospital.

There are private Nursing Homes in Madikeri, Virajpet, Gonikoppal, Somvarpet, Kushalnagar, Ponnampet and Heggala. Along with them there are private clinics in places like Bhagamandala, Napoklu, Kodlipet, Suntikoppa, Sampaje, Ayyangeri, Karmadu, Balele, Murnad, Kutta, Sreemangala, Birunani, Hudikeri, Tolur, B.Settyhalli, Abburkatte, Madapur, Chettali, Pollibetta,

Kareke, Cherambane, Bettageri and at other places. The people are more attracted towards Nursing Homes and private clinics in these days.

The mobile unit of Venkata Ramana Gowda Hospital of Sullya examines the patients and distributes drugs at Kottur, Appangala, Katageri, Bettageri, Kirgunda, Cherambane, Copatti, Chettimani, Bhagamandala in one route, and in another route at Sampaje, Koyanadu and Made twice a week.

FAMILY WELFARE

During the Second Five Year Plan, Family Planning Programme on a mass scale was adopted at National level. In 1957, District Level Family Planning Associations were started. By about 1968 in Madikeri, Virajpet and Somvarpet hospitals, family planning centres were opened. Family Welfare Programme was earlier called as Family Planning Programme. Later, when the importance of this was realised, the Health Department was named as Health and Family Planning Department. The District Health Officer was called District Health and Family Planning Officer. To implement effectively the Family Planning Programme at district level Family Planning Bureau was opened in District Health and Family Planning Officer's Office in 1964. In 1978, Family Planning Programme was named as Family Welfare Programme and the designation of the District Health Officer was renamed the District Health and Family Welfare Officer. Earlier, in order to encourage Family Planning operations wide publicity was given. Later incentives were offered to them. Now the incentive amount is increased and motivators are also given incentives. Government servants who have undergone the sterilisation operations are given special leave and special increment as incentives. Associations like Rotary and Lions Clubs have contributed for the success of the Family Welfare Programme by their participation.

In 1969, Post-Partum Centres Programme, was started by the Government of India to improve the health conditions of children and women through which Family Welfare Programmes were also made successful. Under this scheme, the pregnant women and children are immunised against dreadful diseases and prophylaxis against nutritional anaemia and night blindness. In the district there are post-partum centres at District Hospital, Madikeri, general hospitals at Virajpet and Somvarpet. Medical termination of pregnancies are available in the Aswini Hospital of Madikeri, India Health Project Hospital, Ammathi and the District and General Hospitals of Madikeri, Virajpet and Somvarpet. Family Welfare Centres are found in all the Primary Health Centres and in general hospitals of the district.

Table No. 9

Details of Achievement in Family Welfare Programme are provided in the following table.

Year	Sterilizations	I.U.D.	C.C. users	Oral Pills
1975-76	2,087 (90.3)	307(68.2)	1,135(56.7)	
1976-77	4,370 (138.3)	306(32.9)	990(36.11)	

Year	Sterilizations	I.U.D.	C.C. users	Oral Pills
1977-78	1,387(35.9)	111(14.8)	717(31.0)	
1978-79	1,298(43.3)	220(48.9)	707(47.1)	
1979-80		--- Not Available	---	
1980-81	1,642(66.8)	385(54.2)	1,227(76.7)	
1981-82	2,912(123.4)	504(74.1)	1,164(77.5)	
1982-83	3,175(83.8)	774(60.9)	1,287(76.2)	
1083-84	3,188(61.3)	1,525(70.9)	2,589(123.3)	575(71.9)
1984-85	3,526(61.64)	1,619(43.17)	2,785(121.1)	723(80.3)
1985-86	4,858(116.2)	3,580(179.9)	3,164 (127.2)	840(107.1)
1986-87	5,753(132.3)	3,982(177.8)	7,019(403.4)	1,354(173.6)
1987-88	4,566(105.0)	2,998(121.9)	3,801(138.7)	1,248(160.0)
1988-89	4,163(103.0)	2,853(109.3)	3,965(144.7)	1,307(161.4)
1989-90	3,902(89.7)	2,729(98.5)	3,989(130.3)	1,047(129.5)
1990-91	3,109(77.7)	2,184(90.7)	4,902(122.5)	1,538(153.8)

Family Welfare Committees

There are district-level and taluk-level Family Welfare Committees in the district to review and carry out the Family Welfare Programme. The Deputy Commissioner and Tahsildars are the Presidents of these Committees. These Committees meet every month and observe the progress of Family Welfare Programmes and report the same to higher authorities. Apart from these committees, there is a Committee under the Presidentship of the Deputy Commissioner to award compensation to those who have died during the family welfare operations. The maximum amount of compensation per case was Rs.5,000 upto June 1985 and in June 85, it was raised to Rs.10,000. Such cases of compensation were one each in 1988-89, 89-90 and 90-91.

In the office of the District Health and Family Welfare, there is a Family Welfare Bureau and the District Family Welfare Officer is the head. There are three sections in this Bureau, the Education Section, the Family Planning Operation Section and the Statistics section. In the Statistics section there is a statistician who is looking after the compilation of statistics; In the sterilization section, there are surgeon, a staff nurse, and assistant, who will help the surgeons in the operation camps and also attend the minor operation camps. In the Educational section, there are District Health Education Officer, Block Health Educators, who will look after Education and other training camps, publicity and other activities. During 1989-90, the unit arranged 100 film shows, 412 exhibitions, 246 photo exhibition, 20 mass media propaganda, 20 training camps, three debate competition for Pre-university students, four Anganawadi workers training camps, 37 publicity programmes.

MATERNAL AND CHILD HEALTH (MCH)

Maternal and Child Health Programmes is one of the earlier health programmes. Nutrition, Prophylaxis Against Nutritional Anaemia, Immunization against dreadful diseases are among its programmes. The improvement of health among mothers and children is important for the success of Family Welfare Programmes. The reduction in maternal deaths and infant mortality rate enhances the belief of the masses in the Family Welfare. Hence the Family Welfare Programme gives much importance to the programmes of Maternal and Child Health. As part of the M.C.H. Programme, recently, in all the districts of the State, Immunisation Officers are appointed at the District Health and Family Welfare Office to effectively implement the Immunization Programme. Under Immunization Programme, the children and the mothers are immunized against diphtheria, tetanus, whooping cough, pertusis, measles, tuberculosis, typhoid, etc.

In the District, MCH centres have been opened in General Hospitals, Primary Health Centres and Units and in Community Health Centres. The achievements of the M.C.H. programme from 1975-76 to 1989-90 are given in the Table No. 10. (See pages 720-21)

Integrated Child Development Services (ICDS)

It was on October 2, 1975, that the Integrated Child Development Services was started in the country. This is a multi-faced programme involving a number of Departments. The beneficiaries of this scheme are pregnant women, lactating mothers, women belonging to the age group of 15 to 44 years and children below six years of age. The beneficiaries under this scheme are given nutritious food along with vitamins so that their health and longevity be improved. The activities of this scheme are carried out through 'Anganawadi' centres. The Medical Officer along with Nurses visits the Children and Mothers. The deficiencies and diseases of vitamin and nutrition are noted in their cards, so that care may be taken to improve their health. In case of minor ailments necessary treatment is given on the spot, and for better treatment they are referred to the Primary Health Centres, district or general hospitals. Children of age 0-6 years, pregnant women and mothers are immunised against dreadful diseases. In Virajpet Taluk of the district the I.C.D.S. was started in 1975. Later, the Scheme was started in Madikeri taluk under Government of India programme. There are 257 centres in Virajpet taluk and 202 centres in Madikeri taluk. The State Government started an I.C.D.S. Programme in Somvarpet taluk in 1985-86. Now there are 100 centres. There are Medical Officer in Hudikeri and Suntikoppa Primary Health Centres who are looking after this programme. To assist them there are four Lady Health Visitors, 12 Junior Health Assistants (Details in Ch.16).

School Health Programme

All PHCs and PHUs have introduced the School Health Programme when the Multipurpose Health Workers Scheme was introduced in 1978 in all the PHCs. The medical officers of PHCs and PHUs under their jurisdiction examine the school children and administer, D & T and T.T. under Immunisation programme, along with medical examination.

During 1990-91, 29 medical officers of Primary Health Centres/units had examined 20,460 students in 186 lower and 211 higher primary schools, out of 1,26,208 students. Tetanus toxoid was administered to 8,493 children under Immunization Programme.

Drugs Control Department

The Drugs Control Department protects the health of consumers by examining the drugs manufactured in the State and also the drugs which arrive from outside the State. It controls their standards and prices. To carry out all these the Department administers the following Acts and Rules thereunder: 1) The Drug and Cosmetics Act of 1940, 2) The Drug Price Control Order of 1979, 3) The Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954, 4) The Pharmacy Act, 1948 and Education Regulation thereunder, 5) The Import Trade Regulations for the Grant of Essentiality Certificate to the Pharmaceutical Industries, 6) The Poisons Act of 1919 and Karnataka Poisons Rules 1966 and 7) The Narcotics and Psychotropic Substances Act, 1985.

According to these Acts, the Department issues permission for manufacture and sale of drugs. The inspection staff of the department will find out the hoax drug manufacturers and prosecutes them. Drugs and Cosmetics are examined and their standards are determined. In addition, the Department is also entrusted with the responsibility of Pharmacy Education. The Department is having a laboratory in Bangalore to examine the samples of drugs. To carry on the administration in a smooth manner, the State is divided into six divisions and every division has an Assistant Drugs Controller. Kodagu belongs to Mysore Division and there is one Drug Inspector for the district at Madikeri, who is assisted in his office by a Typist and a peon. He is under the control of Assistant Drugs Controller of Mysore Division. In 1992-93, there were seven wholesale drug merchants and 44 medical shops in the district. In addition to these, there were 33 domestic drug shops. In 1990-91, 37 samples from the district were sent for examination to Drugs Testing Laboratory.

Indian Medical Association

A Branch of the Indian Medical Association is functioning in Kodagu even earlier to Independence. At present there are ten life members and five annual members in the Branch. The Medical Association normally arranges Seminars and Lectures by experts and also distributes medicines freely.

Table

Table Shwoing the causes of details in

Diseases	1971	1972	1973	1974	1975	1976	1977
Cholera	4	2	3	-	1	2	-
Malaria	47	36	5	-	12	33	20
Typhoid	5	9	3	4	24	9	4
Other fevers	85	291	156	39	157	68	8
Dysentery & Diarrhea	19	35	21	17	16	40	38
Respiratory diseases	13	38	30	15	22	48	44
T.B.	20	31	5	3	37	18	18
Leprosy	-	4	-	-	-	-	1
Maternal deaths	4	19	-	-	3	4	4
Suicide	9	3	5	2	8	3	9
Drowning	4	1	2	4	4	6	6
Wounds & Accidents	10	19	7	6	12	9	-
Killed by wild beasts	3	1	-	1	-	-	-
Snake-bite	-	-	-	-	1	1	3
Rabies	1	1	1	-	1	-	-
Tetanus	5	-	5	3	7	1	-
Diphtheria	1	7	4	3	-	-	-
Whooping Cough	2	-	-	7	-	-	-
Pulmonary	-	-	6	4	1	6	3
Other causes	467	721	556	277	692	907	888
Polio	-	-	-	-	1	-	-
Causes not stated	5	10	8	19	28	107	70
Total	704	1,228	817	404	1,027	1,262	1,116

No cases of plague and small pox were reported in the district.

No 5

Kodagu district from 1971 to 1986

1978	1979	1980	1981	1982	1983	1984	1985	1986
-	-	-	-	13	-	6	3	12
18	9	2	-	-	1	4	1	-
1	7	-	5	2	-	-	1	2
3	2	24	52	49	133	20	23	19
33	20	45	23	9	24	9	17	10
55	29	35	5	1	16	7	-	26
12	17	16	-	7	11	20	6	5
1	2	-	1	-	1	6	-	1
4	9	5	1	10	3	12	11	8
10	10	34	18	13	29	15	14	14
6	9	5	1	10	3	12	11	8
10	35	35	17	23	22	26	16	27
-	1	-	-	-	-	-	-	-
2	2	2	2	1	4	4	5	5
1	3	1	-	-	-	4	-	2
2	-	1	2	2	3	4	2	2
-	2	-	1	-	1	2	1	-
-	-	-	-	-	-	2	-	-
4	1	-	6	4	-	-	-	-
738	957	38	689	564	677	1163	857	743
1	-	3	-	-	-	-	-	-
96	112	33	84	266	255	104	437	325
997	1,227	281	911	969	1,180	1,412	1,400	1,204

Table
Primary Health

Sl. No.	Health Centres	Year of starting	No. beds	Sub-centres	In-patients	Out-patients	Deliveries conducted
<u>Madikeri Tq.</u>							
1.	Napoklu	1888	30	7	481	15,631	106
2.	Bhagamandala	1910	14	10	218	13,862	435
3.	Murnadu	1930	18	9	231	12,794	-
4.	Cheyendane	1953	10	5	60	9,532	20
5.	Sampaje	1952	14	11	120	6,382	380
<u>Somvarpet Tq.</u>							
6.	Shantalli	1958	8	19	517	2,738	15
7.	Suntikoppa	1893	12	21	898	38,013	641
8.	Kodlipet	1956	15	4	182	7,031	211
9.	Hebbale	-	6	6	81	6,757	9
<u>Virajpet Tq.</u>							
10.	Balele	1939	14	12	146	8,277	18
11.	Hudikeri	1962	6	19	-	4,387	-
12.	Kutta	1955	28	8	206	13,975	215
13.	Marenad	1958	18	6	-	3,660	4
14.	Sreemangala	1913	16	4	400	7,493	229
15.	Tithimathi	1949	16	22	-	5,154	3

D.P.T. : Diphtheria, Pertusis and Titanus toxoids;

D & T : Diphtheria & Titanus serum; and

T.T. : Titanus Toxoids.

No 7

Centres

Operations performed	Family Welfare		M.C.H. Programme				National Programme of T.B. & Leprosy (patients treated)	
	Sterilization I.U.D.		D.P.T.	D & T	T.T. Children & mothers	Oral Polio	T.B.	Leprosy
68	68	66	447	237	393	447	11	2
199	199	146	518	468	412	-	-	-
-	198	127	589	470	643	589	5	2
-	29	57	415	295	390	415	-	1
111	124	57	494	430	497	494	21	3
-	358	244	57	494	430	497	21	3
-	294	243	2,099	1,572	2,926	2,099	8	13
-	154	86	282	334	336	282	3	-
-	314	48	1,335	1,007	1,735	1,335	4	-
113	113	-	7	12	1,004	712	13	4
-	299	164	990	1,151	1,132	990	-	-
-	117	72	362	475	701	362	90	42
-	49	61	250	293	567	250	4	2
-	89	92	279	280	282	279	10	4
-	414	217	1,136	1,117	234	1,136	-	-

Table

Primary Health

Sl. No.	Name of Health Units	Year of starting	No. of beds	Sub-centres	In-patients	Out-patients	Deliveries
<u>Somvarpet Tq.</u>							
1.	Gowdalli	1982	-	6	-	6,735	125
2.	Madapura	1952	12	8	262	7,278	52
3.	Kushalanagar	-	20	4	880	41,304	369
4.	Chettalli	1953	18	-	96	7,837	36
5.	Sreemangala	1974	-	1	-	6,826	-
6.	Nanjarayapattana	1972	6	-	65	10,511	15
<u>Virajpet Tq.</u>							
8.	Gonikoppal	1890	45	-	2,940	38,427	678
9.	Siddapura	-	51	-	1,468	24,219	604
10.	Kanuru	1951	-	1	-	6,88-	19
(Ayurvedic)							
11.	Karike	-	-	-	-	2,903	-
12.	Ballamavati	1972	-	2	-	2,463	-
13.	Arapattu	1972	-	-	-	4,763	-
(Homeopathic)							
14.	Parane Mobile units	1986	-	-	-	4,232	-
15.	Kallahalli	1960	-	2	-	1,945	37
16.	Kushalanger	1967	-	2	-	4,928	17

No 8

Units

General operations	Family Welfare		M.C.H. Programme			National programme of T.B and Leprosy Eradication		
	Sterilization	I.U.D.	D.P.T.	D & T	T.T. for mother and children	Oral Polio	TB	Leprosy
209	209	100	454	390	231	454	12	1
-	139	112	810	625	909	-	6	2
176	176	125	859	332	1080	859	34	14
-	10	11	224	225	481	224	6	-
-	67	22	102	220	182	-	2	-
-	-	16	36	180	60	360	4	1
-	12	9	35	60	62	35	2	7
64	197	45	302	223	409	302	47	3
-	90	94	386	437	434	386	12	5
-	76	58	30	30	50	30	-	-
-	38	-	-	-	-	-	-	-
-	7	14	56	12	65	56	1	1
-	5	11	44	53	56	44	-	1
-	-	5	40	54	143	40	-	-
-	19	14	49	37	143	49	2	-
-	27	1	45	37	36	45	-	-

Table No 10
Maternal and Child Health Programme

Year	D.P.T.	D & T	T.T.	Oral Polio	B.C.G.	Prophylaxis against Nutritional anaemia			
						Mothers	Children	Measles	Typhoid
1	2	3	4	5	6	7	8	9	10
75-76	262 (6.2)	337 (7.4)	162 (4.8)	-	-	4,592 (353.2)	7,230 (556.1)	-	-
76-77	271 (3.5)	38 (1.0)	622 (16.0)	-	-	13,448 (689.6)	7,767 (609.2)	-	-
77-78	3,864 (42.5)	4,630 (89.0)	1,753 (33.7)	-	-	6,700 (137.4)	7,061 (120.7)	-	-
78-79	4,553 (56.9)	7,011 (119.8)	1,389 (35.9)	-	-	10,085 (112.1)	9,622 (106.9)	-	-
79-80				----- Not Available -----					
80-81	6,752 (52.8)	7,675 (79.1)	5,129 (98.6)	-	-	13,629 (117.5)	8,777 (75.7)	-	-
81-82	8,984 (38.0)	7,525 (76.0)	5,357 (95.7)	-	-	12,842 (114.7)	8,763 (78.2)	-	-
82-83	8,990 (60.3)	9,270 (92.7)	7,249 (88.4)	-	-	10,420 (93.0)	9,951 (88.8)	-	-
83-84	11,828	7,605	7,678	-	-	-	-	-	-
84-85				----- Not Available -----					
85-86	14,833 (132.4)	8,850 (129.4)	12,064 (118.7)	-	-	14,993 (133.3)	12,965 (115.8)	-	-

1	2	3	4	5	6	7	8	9	10
86-87	12,316 (107.1)	11,184 (143.4)	13,891 (120.8)	- -	- -	15,259 (102.3)	15,647 (104.9)	-	-
87-88	11,952 (99.6)	9,817 (111.6)	14,970 (118.6)	11,280 (94.0)	- -	22,796 (152.8)	19,002 (119.7)	20,748 (259.4)	-
88-89	12,593 (104.9)	11,087 (124.6)	14,304 (110.0)	10,481 (87.3)	13,036 (108.6)	23,367 (147.2)	27,057 (169.4)	9,773 (81.4)	-
89-90	11,102 (92.5)	9,518 (94.8)	13,746 (104.1)	11,098 (92.4)	12,729 (106.0)	24,418 (182.2)	27,198 (82.9)	9,615 (80.1)	532 (5.2)
90-91	12,169 (84.5)	10,554 (95.9)	13,927 (89.2)	12,169 (84.5)	13,847 (96.10)	22,418 (194.6)	25,183 (83.4)	10,757 (74.7)	-

The figures of B.C.G. and Polio are not available for the earlier periods.

Immunization against Typhoid and Measles is a recent programme.