CHAPTER XVI

MEDICAL AND PUBLIC HEALTH SERVICES

Early period

THE Ayurvedic system of medicine was followed all over India from very early times. It had its roots in the climate, vegetation and culture of the country. It seems to have been a part of Sanskrit learning and was generally taught in many Sanskrit schools. The Ayurvedic doctors were noted for their knowledge of medicinal properties of plants and herbs. A good Ayurvedic practitioner was capable of affording relief to his patients with the help of ordinary herbs and plants available in the rural areas without having to depend on costly drugs. Knowledge of some Ayurvedic medicines was common in those days and many house-hold remedies were fairly efficacious for common ailments. The Muslims brought the Unani system of medicine and it was practised by the *hakims*. They did not penetrate into the rural parts and their practice was generally confined to the urban areas. They enjoyed not only the patronage of the Muslim aristocracy but also that of a considerable section of the Hindus.

The *vaidyas* continued their practice of Ayurveda both in the urban and rural areas, and the common people had great faith in them. The medicines that they gave did not cost much and were easily obtainable. Even today, it is found that a large number of people in the rural as well as urban areas are being serviced by practitioners of indigenous systems of medicine. With the progressively increasing contact with the East India Company and the British officers, the western system of medicine came into vogue in India.

Till about 1870, the health services in India were mainly concerned with the improvement of the health of the armed forces in the country. Heavy mortality caused by the out-breaks of epidemics such as plague and malaria showed the need for more active State participation in improving the health of the people. The first All-India Medical Conference held in 1911 noticed that only very few towns and villages in the country had

any satisfactory system of conservancy. Till the reforms of 1919, efforts were confined to the promotion of sanitation by making it one of the important duties of the local bodies.

Advent of allopathic system

The allopathic or western system of medicine was ushered in Mysore State after the Fourth Mysore War in 1799 when the British established themselves in Mysore. After the assumption of the Government of the State by the British in 1831, the Surgeon to the Mysore Commission was in general control of vaccination. With the establishment of district hospitals in the several divisions a little later, a Civil Surgeon was appointed in the headquarters of each of the divisions. This officer was also the Superintendent of local jails and Inspector of all the medical institutions within the limits of the division. The medical institutions in the districts were also being inspected by the Deputy Surgeon-General of the Indian Medical Department for Mysore and the Ceded Districts. In addition to this inspection work, he also performed the duties of the Sanitary Commissioner and Registrar of Vital Statistics. In 1880, the Deputy Surgeon-General was withdrawn and his duties, so far as Mysore was concerned, were transferred to the Surgeon to the Mysore Commission.

The medical set-up underwent a complete change after the rendition in 1881. In the month of May 1884, a new scheme for the establishment of a local medical service composed of duly qualified doctors was introduced. The head of the Medical Department, who was the senior-most of the covenanted medical officers, was called Senior Surgeon. The other local medical officers were the Surgeons, Assistant Surgeons and Hospital Assistants. A new grade of Sub-Assistant Surgeons was created in 1888.

Earlier re-organisation

In course of time, the public health administration of the districts was also reorganised so as to make it more useful and efficient. The Senior Surgeon was made also *ex-officio* Sanitary Commissioner in the year 1887. Scrutiny and compilation of birth and death returns, supervision of vaccination work and control of epidemics like plague, cholera and small-pox, were some of the functions of the Sanitary Commissioner. Between 1898 and 1902, a special Plague Commissioner was appointed to check the spread of this deadly disease. The year 1907 saw the re-organisation of the Sanitary Department, when a separate sanitary service was introduced and Divisional Sanitary Officers were appointed. Between 1909 and 1910, the posts of Divisional Sanitary Officers were abolished and a new cadre of District Sanitary Officers was created. They were placed under the Deputy Commissioners of the district.

In 1917, a full-time Sanitary Commissioner was appointed as the head of the department. The District Medical Officer of Mysore district, of which Mandya formed a part, became the *ex-officio* District Sanitary Officer also. In 1939, Mysore district was bifurcated and the new district of Mandya was constituted. The Government sanctioned the post of a District Health Officer for Mandya district in 1944. But till July 1953, the District Medical Officer continued to hold the additional charge of the sanitary office. The construction of the Visvesvaraya canal system in the district incidentally brought in a public health problem in the canal areas, as it increased the incidence of malaria. With a view to combating the disease, a health unit was formed in 1929. Thereafter, a net-work of health units came to be established not only to check malaria but also to improve rural health by various programmes.

District Health Organisation

The district health organisation came into being in 1945. A Malaria Training Centre was set up at Mandya in 1952 with the assistance of the Rockefeller Foundation in order to meet the demand for trained personnel for malaria control and eradication. In 1954, a Malaria Investigation Centre started functioning at Mandya and a district laboratory was established in 1958. In 1961, the control of the medical institutions of the rural areas was transferred to the Public Health Department. An Orientation Training Centre was sanctioned in 1962 for giving in-service training to the para-medical personnel. In collaboration with the National Tuberculosis Institute, Bangalore, a district tuberculosis organisation was formed in 1964. In 1965, a District Family-Planning Bureau was organised.

In order to have an effective control over both preventive and curative sides, the Public Health and Medical Departments were amalgamated in 1965 and an officer designated as Director of Health Services in Mysore was appointed as the head of the re-organised department.

District Health Officer

There is a District Health Officer in Mandya who is in charge of the administration of the public health wing of the department in the district. He is responsible to the Director of Health Services in Mysore, Bangalore. He is both a technical and administrative officer and deals with problems of public health such as control of epidemics, malaria eradication, maternity and child welfare, vital statistics, *jatra* sanitation, environmental sanitation, health education and laboratory work associated with public health. Since 1st June 1960, the District Health Officer is also in over-all charge of all the medical institutions at the taluk level in the district.

Vital statistics

In the early days, there was no special agency for the registration of births and deaths other than the village patels. These village officers were required to send monthly returns to the taluk office from where the lists were transmitted to the district office to be later forwarded to the Sanitary Commissioner's office. With a view to securing better registration of particulars connected with births and deaths, the relative rules were revised in 1915-16 according to which Inspecting Officers had to scrutinise the entries in registers. Again in 1918, a new regulation was introduced to improve the system of collection, compilation and publication of vital statistics. According to this new regulation, the entries with reference to births and deaths had to be certified by a technical officer after a sample check-up in the area concerned. This proved helpful in removing irregular and exaggerated entries.

The following table gives the number of births and deaths as recorded in the registers in Mandya district for the period from 1955-1965 :

Year		*Births*	*Deaths*
1955	..	15,793	5,800
1956	..	14,150	5,730
1957	..	13,238	5,744
1958	..	13,904	5,602
1959	..	13,326	4,729
1960	..	11,029	3,639
1961	..	11,214	3,601
1962	..	9,904	3,162
1963	..	8,543	3,017
1964	..	10,369	2,196
1965	..	10,081	3,847

The birth and death rate per mille in the district during the years from 1955 to 1965 are given below :

Year		*Birth-rate*	*Death-rate*
1955	..	20.8	7.7
1956	..	18.6	7.5
1957	..	17.2	7.5
1958	..	17.9	7.2
1959	..	17.0	6.0
1960	..	13.8	4.5
1961	..	13.9	4.4
1962	..	10.7	3.4
1963	..	9.1	3.2
1964	..	12.6	Not available
1965	..	19.6	4.7

From the foregoing table it is seen that in recent years, the death rate has been falling. It was due to intensive preventive and curative measures undertaken by the health services authorities and other factors. There has been a systematic drive to control epidemics and a large number of people have been vaccinated or inoculated. In this connection, it may be pointed out that these birth and death rates fall far short of the known rates for India. This evidently shows that there are certain omissions in recording the vital events, particularly in regard to deaths. However, a sample survey carried out has revealed that the birth-rate was about 42 and the death-rate about 20.

Infant and maternal mortality

As regards infant mortality, the main causes for deaths were prematurity, bronchitis, diarrhoea, dysentery, fevers, convulsion, sepsis and respiratory diseases. The table below gives the numbers of still-births and infant deaths reported and the infant mortality rate per mille in the district for the years from 1955 to 1965 :

Year	*No. of still births*	*No. of infant deaths*	*Infant mortality rate*
1955	279	1,237	78.3
1956	351	1,268	127.8
1957	325	1,009	76.2
1958	306	814	58.5
1959	254	670	50.3
1960	220	465	42.1
1961	215	543	48.4
1962	256	422	42.6
1963	204	294	34.4
1964	138	831	80.0
1965	211	963	61.0

The main causes for maternal deaths were anaemia, haemorrhage, eclampsia and difficult labour. The number of maternal deaths reported and the maternal mortality rates per mille in the district during the years from 1955 to 1965 are given below .

Year	*No. of maternal deaths*	*Maternal mortality rate*
1	2	3
1955 ..	98	6.1
1956 ..	106	7.3
1957 ..	83	6.0
1958 ..	90	6.3
1959 ..	87	6.4
1960 ..	63	3.8

1		2	3
1961	..	42	3.6
1962	..	53	5.3
1963	..	21	2.5
1964	..	58	5.7
1965	..	87	4.4

Number of deaths

The following table shows the number of deaths caused by various diseases in the district during the years 1955, 1958, 1961, 1964 and 1965 :

Causes	1955	1958	1961	1964	1965
Plague ..	..	4	..	..	..
Small-pox ..	4	328	59	..	..
Cholera ..	87	14	11	25	124
Malaria ..	1,158	954	680	..	..
Typhoid ..	269	224	150	10	60
Other fevers ..	1,254	1,012	..	307	663
Dysentery and Diarrhoea.	551	649	524	172	344
Respiratory diseases ..	474	392	..	65	170
Tuberculosis ..	219	155	142	..	..
All other diseases ..	1,322	1,430	1,932	1,313	1,793

The figures reveal that 'other' fevers, dysentery and diarrhoea and respiratory diseases had the highest incidence. It is also seen that from 1955 to 1961, a large number of deaths were shown as caused by malaria. This was largely due to the compilation of the figures furnished by the village patels, which might not be quite accurate. As a result of the sustained drive under the National Malaria Control Programme and subsequently, under the National Malaria Eradication Programme, the malaria morbidity has now been considerably reduced.

The sub-joined table shows the common diseases for which the majority of patients were treated in the district during 1964 and 1965 :

Diseases	*1964*	*1965*
Pneumonia ..	4,819	7,027
Other respiratory diseases ..	62,030	63,204
'Other' fevers ..	31,426	32,400
Diarrhoea ..	29,727	38,552
Dysentery ..	15,355	20,273
Other digestive diseases ..	43,353	46,121
Worms ..	4,844	7,463

Aneamia	..	14,366	17,514
Ulcers	..	46,716	46,968
Skin diseases	..	27,918	27,431
All other diseases	..	1,00,465	1,25,030

The above figures show that digestive diseases, 'other' fevers, respiratory infections and ulcers had a high incidence.

Epidemics

When an epidemic breaks out in the district, the Health Inspectors and Basic Health Workers are alerted to work in close unison and under the general direction of the District Health Officer. The Health Inspectors or the Sub-Inspectors have to tour the area in order to know and assess the extent and severity of the epidemic. All the wells in the area are thoroughly disinfected with potassium permanganate and the villagers are advised to isolate the sick and to evacuate the houses. People living in the infected areas are advised not to entertain any friends or relatives. Disinfection and fumigation are carried out wherever possible. It is the duty of the Health Inspectors to enquire into and ascertain the causes of origin and spread of epidemic diseases within their jurisdiction and send periodical reports to the nearest Medical Officer and also to the District Health Officer. Various conditions injurious to public health are systematically removed so as to minimise the incidence. Special attention is paid to water supply sources and to the disposal of refuse. During the time of fairs and festivals, special staff is requisitioned to control any out-break of epidemics.

Cholera

Among the communicable diseases, the most dreaded ones are the cholera, plague and small-pox. In recent years, there has been a considerable decrease in the incidence of cholera in the district. Chlorination of drinking water wells was periodically attended to and all necessary precautions were being taken to prevent the out-break of this disease. The district is not endemic for cholera, though, however, frequent out-breaks have been encountered. A total of 1,20,118 inoculations in the infected villages and 78,409 inoculations in other villages were done in recent years.

Plague

The district is almost free from the ravages of plague. This disease has been completely under control and in recent years, the incidence is almost nil ever since D.D.T. spraying work was undertaken by the public health authorities.

Small-pox

Small-pox has been a major public health problem in the State. Large-scale efforts are being made through primary vaccination and subsequent planned periodical vaccination to bring the disease under control. An expert committee was also

constituted in 1959 to suggest ways and means for eradication of small-pox and cholera in the State. Small-pox particularly affects children. Vaccination, being the only preventive, is done with a phased programme by the health staff. The vaccinations are done by trained vaccinators, who are responsible to the District Health Officer. They are stationed in the headquarters of each taluk. The vaccinators are required to get into touch with the Tahsildar for any assistance in the discharge of their duties. The vaccination work is carried on after a verification of birth registers. Systematic house-to-house inspection of the whole town or village is conducted for detection of unprotected cases. The minimum out-turn of work for each vaccinator is about two hundred successful vaccinations in a month. He is required to carry out not less than 3,000 vaccinations in a year. When epidemics occur, the vaccinators have to rush to the infected areas in order to vaccinate all unprotected children and adults. All the factories and schools are also visited in an endeavour to vaccinate all unprotected persons. The school teacher and the factory manager are expected to obtain the consent of those who are to be vaccinated. Re-vaccination, though not compulsory, is essential for protection against small-pox.

Eradication programme

The Vaccinator or Basic Health Worker performs the primary vaccinations in his allotted area throughout the year, for which purpose he prepares a list of unprotected children as well as adults. Apart from this, he takes up mass-vaccination in about one-fourth of the area in the first year so that he comes back to the same sector in the fifth year. Whenever any small-pox case is reported in his area or a small focal out-break occurs, the available staff are mobilised to do intensive vaccination work in that area. Under the National Small-Pox Eradication Programme which was launched in the district on 31st October 1963 and completed on 5th March 1964, in all, 6,90,713 vaccinations were done, of which 55,485 vaccinations were primary and 6,35,228 were re-vaccinations. A taluk-wise break-up of these figures and percentages of population covered are given below :

Taluk	*Primary Vaccination*	*Re-vaccination*	*Total*	*Percentage*
Maddur ..	8,719	1,03,488	1,12,207	76.8
Malavalli ..	9,845	1,14,293	1,24,138	79.5
Srirangapatna ..	4,406	53,000	57,406	75.5
Pandavapura ..	4,021	65,068	69,089	77.9
Krishnarajpet ..	9,754	92,852	1,02,606	80.5
Nagamangala ..	8,888	77,082	85,970	83.7
Mandya ..	9,852	1,29,445	1,39,297	77.8

The number of vaccinations done by the health units as well as the local bodies for the years 1964 and 1965 were as follows :

Year	Health Units		Local Bodies	
	Primary vaccination	*Re-vaccination*	*Primary vaccination*	*Re-vaccination*
1964	4,077	2,836	2,020	3,737
1965	16,627	36,189	7,365	2,045

Typhoid

During the year 1961-62, a total of 24 typhoid attacks and 16 deaths were reported in the district excluding Mandya town. With a view to checking the spread of this disease, 7,890 anti-typhoid inoculations were done besides undertaking other curative and preventive measures. In addition, 75 typhoid cases and five deaths were reported in Mandya town alone during the month of November 1961 ; to prevent the spread of the infection in this town and its suburbs, an intensive inoculation drive was organised and 11,500 persons were inoculated during that month alone. In 1964, 125 attacks and eight deaths were reported while during the subsequent year, 74 attacks and 17 deaths were reported.

Malaria

Malaria control work was in progress in Mysore State even before the inception of the Five-Year Plans. Malaria had been more wide-spread and had affected a larger number of people than any other disease in the district. It had been a formidable health problem. The State started a programme of research and training for eradication of malaria as far back as 1928.

This was continued and improved during the successive Plan periods. In the beginning, the malaria control operations were confined to the *Malnad* areas which were highly endemic for malaria. Gradually, the services were extended to other areas also. In 1953, the State switched over to the National Malaria Control Programme with the assistance of the Government of India and International Agencies. As a result, five malaria control units were organised at Mandya, Shimoga, Chikmagalur, Hassan and Mysore. During the Second Plan period, additional control units were sanctioned making a total of 14.63 units in the State.

Eradication programme

In the year 1958, the programme was switched over to the National Malaria Eradication Programme, raising the total number of units to 19.13 so as to cover the entire State. Consequently, the spraying programme was intensified and surveillance work

introduced. The malaria surveillance workers paid fortnightly visits to all the houses in their areas, investigated fever cases, took their blood smears and treated them with anti-malaria drugs. The Medical Officers in charge of medical institutions and the private practitioners were all requested to extend their co-operation in collecting blood smears from all fever cases and send them to the unit laboratory for examination. In addition to appraisal surveys, the Medical Officer of Health of the National Malaria Eradication Unit also conducted mass blood surveys in and around the areas where parasite-positive cases were reported. Blood smears collected were examined at the unit laboratory and the results communicated to the authorities concerned. All the parasite-positive cases were treated with aminoquinolines and the cases followed up till their blood pictures showed negative results.

Blood smears

The district entered the Consolidation Phase on 1st April 1960. In October 1964, the taluks of Maddur, Mandya, Malavalli and Nagamangala entered the Maintenance Phase, while the remaining three taluks, *viz.*, Srirangapatna, Pandavapura and Krishnarajpet entered this phase during the next year. The number of blood smears collected and the number of positive cases during 1964 and 1965 are indicated below :

Year	*Blood Smears*			*Positive cases*
	Active	*Passive*	*Mass*	
1964	7,49,721	35,379	7,809	19
1965	28,138	30,162	517	1

Malaria control work in Shivasamudram and Shimsha Electrical colonies by larvicidal measures was also in progress since 1961. One Health Inspector in each colony was in charge of control operations in addition to other health activities. Large quantities of burnt-oil were used in connection with the larvicidal measures undertaken in the two colonies and a number of houses were sprayed with diozinal.

It is of interest to note that the sustained anti-malarial measures pursued in the district have almost rooted out this disease. A few odd cases found here and there were either imported or were relapses of old ones. However, a close vigilance is being maintained by the Basic Health Workers in their respective sub-centre areas. The malaria maintenance work has been now merged with the general health services.

Investigation and Training Centre

The Malaria Investigation-*cum*-Training Centre, Mandya, provides in-service training facilities in the field of malariology to the personnel of the department. The centre is headed by an Assistant Director of Public Health with State-wide jurisdiction.

He has nine assistants, three gazetted and six non-gazetted, for research and training in malaria, plague and *aedes aegypti*. Focal out-breaks of malaria are duly investigated by the Centre. Upto the end of 1965, about 1,200 persons, both medical and paramedical, were given training at this Centre in 60 training sessions; Medical Officers of Health, Medical Licentiates, Junior Entomologists, Senior Health Inspectors, Junior Health Inspectors, Malaria Inspectors, Village-Level Workers, Malaria Supervisors, Laboratory Technicians and Health Assistants were among those who received training.

Leprosy

Prior to the formation of the new Mysore State, leprosy was endemic only in a few taluks of Mysore, Kolar and Bellary districts. The overall incidence rate then was about 0.2 per cent. In the new Mysore State, however, the average rate of incidence is estimated to be 0.7 to 1 per cent, as the districts of Belgaum, Dharwar, Bijapur, Bidar, Gulbarga, Raichur and South Kanara have comparatively a high incidence of leprosy. As early as in 1845, the State had a Leprosy Asylum in Bangalore. This institution was developed in subsequent years and is now known as the Central Leprosarium.

Apart from the institutional treatment at the Central Leprosarium, the dispensaries in the endemic areas are treating leprosy cases by holding weekly clinics. The modern concept in the control of leprosy being prophylaxis and treatment at the houses of the patients, several leprosy control units have been established during the Plan periods.

In Mandya district, preventive steps against leprosy are being taken in Malavalli and Maddur taluks. During 1964, 985 cases were under treatment, whereas in 1965, 1,231 cases were under treatment, in the health unit areas.

Health Education

Health education forms one of the important activities of the department. The Basic Health Workers, who primarily attend to this programme, inculcate in the minds of the people the need for environmental sanitation. The health education activities are being carried out on an integrated scale. The department also arranges for the celebration of the World Health Day, Anti-fly Week, Leprosy Day, Family Planning Day and the like in the district. On such occasions also, the health services authorities make arrangements to give talks on various health subjects in the villages, towns and health unit areas in the district with a view to acquainting the general public with the precautions they need to take. Educative films on health are also shown to the people and poster exhibitions held to bring home to them the supreme importance of following sanitary principles and taking preventive measures. Auxiliary Nurse-Midwives also do educational work and they are guided by the Health Visitors.

School Health Service

There is provision for regular medical examination of school children at Pandavapura, Maddur, Malavalli, Srirangapatna, Arakere, Besagarahalli, Kyathanahalli, Akkihebbal, Bellur and other places. The Assistant Medical Officers of Health concerned conduct medical examination of school children. In addition to the above, the Medical Officers of Health visit various schools in the health unit areas during their tours and give talks in the schools on subjects of health.

Two Primary Health Centres have been selected in the district for the school health programme, one at Shivalli and the other at Bellur. Two Auxiliary Nurse-Midwives were also trained under this programme and they are now working as School Health Assistants. In the Bellur school health programme, 700 children were examined in 1965. Likewise, 300 children were examined in the Shivalli school. The number of schools selected in Bellur were 29 and at Shivalli 10, having, in all, more than 4,000 children. This health scheme is proving popular.

Sanitation in Fairs

Under the provisions of the Mysore Public Health Act, 1944, major *jatras* in the district are notified by the Government and necessary measures are taken to enforce the rules relating to sanitation and public health in co-operation with the *Muzrai* and other authorities. Special attention is paid towards cleanliness of food and water and also general cleanliness in the *jatra* areas.

During 1964 and 1965, in all, 67 hand-flush latrines were constructed in the district. During the same period, 210 soak pits were also constructed under the general sanitation programme.

Maternity and Child Health Services

During 1963, the Government sanctioned the appointment of District Nursing Supervisors and 20 such Supervisors were working in the district during 1965-66. The maternity and child health services offered ante-natal, natal and post-natal attention and care of children, including milk-feeding programme. Both institutional and domiciliary services are rendered.

During 1964 and 1965, over 10,000 and 12,000 delivery cases respectively were attended to by mid-wives and *dais* in the district. International organisations like the UNICEF and the World Health Organisation have continued their assistance to maternity and child health services in the State by providing transport, equipment, drugs and diet supplements to the health units. They have also lent the services of two experts.

Family Planning

Since 1957, a State Family Planning Board has been functioning with the Minister for Health as its President. The family planning activities comprise mainly family planning services, training of workers and education of the people in the

matter. There is a District Family Planning Committee at Mandya with the Deputy Commissioner as its chairman, the District Surgeon as the vice-chairman, the District Health Officer as the secretary and certain non-official members, for implementing the family planning programme in the area.

Facilities have been provided in all the major hospitals including the District Hospitals in the State for sterilisation operations, free of cost, with a view to encouraging family planning. In order to popularise surgical methods, services of private medical practitioners are also utilised on payment of a subsidy of Rs. 25 per operation.

Vasectomy camps

Vasectomy camps are organised in the taluk headquarters and in the medical and primary health centre dispensaries and also in villages. Medical advice on methods of family planning is being provided to married persons, who require such advice, and also to those ladies, who, in the opinion of the medical officer, cannot undergo the strain of pregnancy and parturition without danger to health. Large sums of money have been earmarked for purchasing contraceptives, which are supplied to hospitals and dispensaries in the district for distribution among the people.

In 1966, there were one Urban and nine Rural Family-Planning Centres in the district. Fifty-one film shows and ten film-strip shows were conducted in 52 villages during 1965. On an average, about 700 people attended these film shows. Besides these propaganda measures, five orientation training camps, three poster-exhibitions and two dramas were conducted in connection with the family-planning drive. The Primary Health Centres in the district conduct couple surveys and selected couples are advised, through individual contacts, to adopt semi or permanent family-planning methods.

From 1962 to 1965, a total number of 2,597 vasectomy operations had been done in the district. The intra-uterine contraceptive device or the loop measure was introduced in the district in June 1965. Up to the end of December 1965, 3,000 loop insertions had been done.

Orientation Training Centre

There is an Orientation Training Centre at Mandya, functioning since 1962, for training para-medical personnel. Upto April 1966, it had held 24 sessions and had provided training to 232 Health Inspectors, 30 Health Visitors, nine Public Health Nurses and 161 Midwives. In addition, this Centre gives field training in public health to House-men from the Medical College, Mysore, training in applied nutrition to selected medical personnel and orientation to students of Ward Administration Course, Bangalore.

There is also a District Laboratory at Mandya which conducted over 7,300 examinations during 1965.

Primary Health Centres and Units

In 1966, there were eight Primary Health Centres of Government of India-type and 16 Primary Health Units of Mysore-type in the district. Each of the Government of India-pattern health centres serves a population of about 60,000 whereas the Mysore-type unit serves about 15 thousand people. The former, numbering eight, were located at Shivalli (Mandya taluk), Kalamuddanadoddi and Kesthur (Maddur taluk), Hittanahallikoppal (Malavalli taluk), Bellur and Haradanahalli (Nagamangala taluk), Pandavapura and Krishnarajpet. The location of a ninth centre sanctioned for Srirangapatna taluk had not yet been fixed upon till August 1966. Each of these centres has one Medical Officer of Health, one Junior Health Inspector, one Public Health Nurse or Health Visitor, and one compounder and four midwives, while a Mysore-type health unit has one Assistant Medical Officer of Health, one Senior Health Inspector or two Junior Health Inspectors, one compounder and three midwives. There are also some sub-centres located in selected villages and they are manned by Junior Health Inspectors and qualified midwives. The Medical Officer of Health in charge of the Primary Health Units has to visit these sub-centres for holding clinics and to supervise the work being done by the sub-centre staff.

The activities of these health centres and units relate to preventive and curative aspects including clinical examination, prevention and control of communicable diseases, improvement of environmental sanitation, collection of vital statistics, maternity and child health work, health education and surveys, proper sanitary arrangements in connection with fairs and festivals and supply of drugs and diet supplements to the rural population.

Allopathic dispensaries

In 1966, there were 42 allopathic dispensaries, seven of which were combined ones with a seperate women's section for looking after the needs of maternity cases. In many of the dispensaries, a few beds (ranging from two to six) are provided for emergency cases. Most of these dispensaries are maintained by the local bodies. Two of the dispensaries, located at Krishnarajasagar and Shimshapura, are meant for departmental officials only.

The staff of a dispensary generally consists of a Medical Officer, a compounder and a mid-wife. In the case of a combined dispensary, besides the above mentioned staff, there is a lady doctor, two midwives and one lady compounder. The statement given below shows the locations and types of these dispensaries :

Sl. No.	*Place and Taluk*	*Type of Dispensary*
1	Aghalaya, Krishnarajpet	R.S.L.F.D.
2	Agasanapura, Malavalli	L.F.D.
3	Akkihebbal, Malavalli	L.F.D.
4	Arakere, Srirangapatna	L.F.C.D.
5	Ballenahalli, Srirangapatna	L.F.D.
6	Bandihole, Krishnarajpet	G.D.
7	Basaral, Mandya	L.F.D.
8	Belakavadi, Malavalli	L.F.D.
9	Bellur, Nagamangala	L.F.D.
10	Besagarahalli, Maddur	G.D.
11	Bindiganavale, Nagamangala	L.F.D.
12	Bukinakere, Krishnarajpet	L.F.D.
13	Chinkurli, Pandavapura	L.F.D.
14	Chinya, Nagamangala	L.F.D.
15	Devalapura, Nagamangala	L.F.D.
16	Doddarasinakere, Maddur	G.D.
17	Dugganahalli, Malavalli	L.F.D.
18	Halagur, Malavalli	L.F.D.
19	Hittanahalli-koppal, Malavalli	L.F.D..
20	Keregode, Mandya	G.D.
21	Kesthur, Maddur	G.D.
22	Kikkeri. Krishnarajpet	L.F.D.
23	Kilara, Mandya	G.D.
24	Kirugaval, Malavalli	L.F.D.
25	Koppa, Maddur	L.F.D.
26	Kothathi, Mandya	G.D.
27	Krishnarajpet, Krishnarajpet	L.F.C.D.
28	Krishnarajasagar, Pandavapura	G.D. (P.W.D.)
29	Kyathanahalli, Pandavapura	L.F.C.D.
30	Maddur, Maddur	L.F.C.D.
31	Malavalli, Malavalli	L.F.C.D.
32	Mandya, Mandya	G.D.
33	Melkote, Pandavapura	L.F.D.
34	Nagamangala, Nagamangala	L.F.C.D.
35	Pandavapura, Pandavapura	L.F.D.
36	Santhebachahalli, Krishnarajpet	L.F.D.
37	Seelanere, Krishnarajpet	L.F.D.
38	Shimshapura, Malavalli	G.D. (M.S.E.B.)
39	Shivalli, Mandya	G.D.
40	Sindhaghatta, Krishnarajpet	L.F.D.
41	Somanahalli, Krishnarajpet	G.D.
42	Srirangapatna, Srirangapatna	L.F.C.D.

R.S.L.F.D. ..	Reduced-Scale Local Fund Dispensary maintained by local bodies.
L.F.D. ..	Local Fund Dispensary conducted by local bodies.
L.F.C.D. ..	Local Fund Combined Dispensary maintained by local bodies.
G.D. ..	Government-conducted dispensary.
G.D. (P.W.D.)	Government-conducted dispensary, the maintenance expenditure of which is met by the Public Works Department.
G.D. (M.S.E.B.)	Government-conducted dispensary, the maintenance expenditure of which is met by the Mysore State Electricity Board.

Ayurvedic and Unani dispensaries

There were 13 Ayurvedic and three Unani dispensaries maintained by the Taluk Development Boards, besides nine Government-aided Ayurvedic dispensaries, in the district in 1966. Each of these dispensaries has a *vaidya* or a *hakim*, as the case may be, who is assisted by a compounder. The locations of these dispensaries were as shown below :

Taluk Board Ayurvedic Dispensaries.

	Name of place	*Taluk*
1	Bookanahalli	Krishnarajpet
2	Vittalapura	Do
3	Adichunchanagiri	Nagamangala
4	Kelagere	Do
5	Mylarapatna	Do
6	Naraganahalli	Do
7	Thattekere	Do
8	Kowdle	Maddur
9	Poorigali	Malavalli
10	Mallenahalli	Mandya
11	Kannal	Pandavapura
12	Sunka-Thonnur	Do
13	Chikkarayarahalli	Srirangapatna

Government-aided Ayurvedic Dispensaries.

14	Honnalegere	Maddur
15	Maddur town	Do
16	Neelakanthanahalli	Malavalli
17	Upparahalli	Do
18	Malligere	Mandya
19	Chinya	Nagamangala
20	Mudagundur	Do
21	Madeshwarapura	Pandavapura
22	K. Settihalli	Srirangapatna

Taluk Board Unani Dispensaries.

	Name of place	*Taluk*
1	Ballenahalli ..	.. Krishnarajpet
2	Bheemanahalli ..	.. Nagamangala
3	Byadarahalli ..	.. Pandavapura

District Surgeon

There is a District Surgeon who is the head of the General Hospital at Mandya. He is also responsible to the Director of Health Services in Mysore, Bangalore. In 1966, he was being assisted by 12 Assistant Surgeons, one Nursing Superintendent, two compounders, two X-ray technicians, three laboratory assistants and two assistants for venereal diseases wing and 12 nurses and midwives.

General Hospital, Mandya

The General Hospital, Mandya, began functioning from 1940. In 1966, it had a bed-strength of 105—45 for men, 48 for women (including 28 for maternity cases) and 12 for children. A Family Planning section, a Tuberculosis Clinic and a Venereal Diseases Clinic are also attached to the hospital. The following particulars indicate the working of this Hospital during the year 1964-65 :

Total out-patient attendance ..	94,610
Daily average of out-patient attendance ..	259.7
Total number of in-patient admissions ..	6,444

In-patients :

Ophthalmic cases ..	85
Ear, nose and throat cases ..	124
Leprosy cases ..	134
Venereal-disease cases ..	292
Daily average of in-patients treated ..	113.4

Operations :

Diabetic cases ..	8
Ophthalmic cases ..	11
Ear, nose and throat cases ..	37
Venereal disease cases ..	50
Dental cases ..	105
Tubectomy operations ..	183
Vasectomy operations ..	12

Other treatments :

Number of ante-natal clinics conducted ..	52
Number of intra-uterine contraceptive device insertions.	392

The total expenditure incurred on the Hospital during the year was Rs. 2,26,276.

The Tuberculosis Clinic attached to the General Hospital has been functioning since September 1959. This Clinic is meant for treatment of out-patients only. A doctor and an X-ray technician are attached to this Clinic.

District Tuberculosis Centre

In 1959, the Government of India established a National Tuberculosis Institute in Bangalore with the help of the State Government. This institution helps the campaign against tuberculosis and also affords training facilities for the technical staff engaged in tuberculosis work. A B.C.G. campaign was started in 1952 as a preventive measure against the spread of tuberculosis and this is being carried on. In collaboration with the National Tuberculosis Institute, a District Tuberculosis Organisation was formed in Mandya and a District Tuberculosis Centre was set up in 1964. The Centre has a whole-time District Tuberculosis Officer who works under the control of the District Surgeon. The organisation has established 25 Microscopy Centres in the district, while the various dispensaries act as referal centres. The District Tuberculosis Officer tours in the district to supervise the working of the Microscopy Centres, besides attending to his work at the Tuberculosis Centre at Mandya. Particulars of the working of the District Tuberculosis Organisation for the two years, 1964 and 1965, are given below :

	1964	1965
Number of sputums examined ..	3,355	5,700
Number of sputums found positive for T.B.	206	309
Number of X-ray pictures taken ..	314	1,868
X-Rays found positive for T.B. ..	86	382
Pulmonary T.B. cases treated ..	264	609
Extra-pulmonary T.B. cases treated.	19	99

At the District Tuberculosis Centre at Mandya, 26 major and 506 minor operations were performed during the year 1964-65.

Shivasamudram Hospital

There is also a Government Hospital, with a women's wing attached, at Shivasamudram in Malavalli taluk. It had two doctors and three nurses and a bed-strength of 22, in 1965. Its expenditure is met by the Mysore State Electricity Board and it is open to the employees of that Board only.

Staff strength

The sanctioned staff-strength of the Health Services Department for the district as on 1st July 1966 was as follows :

Class I Medical Officer	..	..	1
Class II Medical Officers	..	..	17

Class III Medical Officers	..	..	46
District Nursing Supervisor	..	..	1
Health Educator	..	..	1
District Extension Educator	..	..	1
Block Extension Educators	..	..	9
Health Supervisors	..	..	2
Health Visitors	..	..	10
Chemist	..	..	1
Statistical Assistant	..	..	1
Senior Health Inspectors	..	..	11
Junior Health Inspectors	..	..	39
Microscopists	..	..	9
Computors	..	..	9
Basic Health Workers	..	..	81
Senior Laboratory Technicians	..	..	4
Projectionists	..	..	2
Compounders	..	..	53
Nurses and Midwives	..	..	156
Family-Planning Assistants	..	..	113
Mechanics, drivers and cleaners	..	..	12
Ministerial staff	..	..	24
Dalayats	..	..	168

There were about ten allopathic private medical practitioners in Mandya town as on 1st January 1966. There were also two Ayurvedic practitioners. The town had three nursing homes, one of which had an X-ray clinic also. According to the census of 1961, the total number of physicians, surgeons and dentists in the district was 208, of whom 111 were working in the urban areas and 97 in the rural areas. These figures included also those who were working in Government and semi-Government medical institutions.