

## CHAPTER XVI

### MEDICAL AND PUBLIC HEALTH SERVICES

**A**N assessment of public health and medical facilities in early **Indigenous** times in the Kolar district is not possible because of **systems of** paucity of reliable source material. However, it is well-known **medicine** that the Ayurvedic system of medicine was in vogue all over the country from very early times. The system had its roots in the climate, vegetation and culture of the country and it seems to have been a part of Sanskrit learning. The Ayurvedic *Vaidyas* were noted for their knowledge of medicinal properties of plants and herbs. A good *Vaidya* 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 upon costly drugs. Knowledge of several Ayurvedic medicines was common in those days and many house-hold remedies were fairly efficacious for common ailments. In many of the villages, there were at least one or two families well-versed in the Ayurvedic system of medicine. People had a deep faith in them and the medicines they gave did not cost much and were easily obtainable.

The Muslims brought the Unani system of medicine into vogue and it was practised by the *Hakims*. They did not, however, penetrate into the rural parts and their practice was generally confined to the urban areas. They enjoyed not only the patronage of the Muslim population but also that of a considerable section of the Hindus. But the Ayurvedic *Vaidyas* carried on their practice both in the urban and rural areas and gained the confidence of a large section of the population from all walks of life. Even to-day, it is found that a considerable number of people in the rural as well as urban areas are being treated by practitioners of indigenous systems of medicine.

With the increasing contact with the East India Company **Advent of** and the British officers, the western or the allopathic system of **allopathic** medicine came to be introduced in India. It may be said that **system**

till about 1870, the health services in India were mainly concerned with the improvement of the health of the armed forces in the country. The heavy mortality caused by the out-breaks of epidemics like plague and cholera showed the need for more active State participation in improving the health of the general population. In Mysore State, the allopathic system of medicine was ushered in after the fourth Mysore War in 1799 when the British established themselves in the State. After the assumption of the Government of the State by the British in 1831, the Surgeon of the Mysore Commission was in general control of vaccination work. A little later, district hospitals were established in several divisions and a Civil Surgeon was appointed in each divisional headquarters. This officer was also the Superintendent of local jails and Inspector of all the medical institutions within his division. Besides, 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, in so far as Mysore was concerned, were transferred to the Surgeon to the Mysore Commission.

**After  
Rendition**

At the time of the Rendition in 1881, there were just two medical institutions in Kolar district, *viz.*, a Civil Hospital and Dispensary at Kolar and a Civil Dispensary at Chikballapur. Of these, the Kolar hospital had 'lying-in-wards' and it treated both in and out-patients, while the Chikballapur dispensary treated only out-patients. After the Rendition, the State undertook the expansion of medical facilities by establishing more hospitals and dispensaries. Though a complete reorganisation of the medical establishment of the State was contemplated, the scheme had to be postponed for some time. In May 1884, a scheme for setting up of a local medical service composed of duly qualified personnel was introduced. The head of the Medical Department was designated as Senior Surgeon. In 1887, posts of Senior Hospital Assistants were created and in the next year, Sub-Assistant Surgeons were appointed to look after rural dispensaries. In 1884, the Kolar Hospital was upgraded into a District Headquarters Hospital and was placed in the second class with a Civil Surgeon as its head. Gradually, dispensaries were set up in all taluk headquarters. A hospital dispensing allopathic medicine was set up in Robertsonpet as early as 1883. Training in scientific midwifery was also provided in the Robertsonpet Maternity Home attached to the hospital. The District Hospital at Kolar had a women's dispensary even at the beginning. Among the earliest medical institutions in the district was also a dispensary for women at Chintamani.

The Government had spent large sums of money in combating plague from the time the disease broke out in 1898 and this necessitated the formation of a separate Public Health Department to overcome such epidemics in a systematic manner. Thereafter, a Special Health Officer was posted to the Kolar Gold Fields. The Government, while extending medical aid on western lines, also encouraged the indigenous system of medicine. In 1918, there was widespread distress in the district on account of a severe outbreak of influenza which affected a considerable number of the population. The Government spent large sums on relief measures and it was realised that an effective organisation for medical relief, prevention of epidemics and improvement of sanitation and public health, both in towns and villages, was necessary and urgent and a committee was appointed for the purpose.

In 1887, the Senior Surgeon to Government was made *ex-officio* Sanitary Commissioner; the duties pertaining to the latter office consisted mainly of scrutiny and compilation of birth and death returns, supervision of vaccination work and the control of epidemics. In 1907, the Government sanctioned a scheme for the organisation of a separate sanitary service in the State, having as its aim, the gradual introduction of a definite and uniform policy of sanitary administration. The State, for this purpose, was divided into three divisions, *i.e.*, western, eastern and southern. Kolar was included in the eastern division. The department consisted of the Senior Surgeon as *ex-officio* Sanitary Commissioner and a full-time deputy to relieve him of all routine work. The District Medical Officer in Kolar was the *ex-officio* District Sanitary Officer. In 1909-10, the posts of Divisional Sanitary Officers were abolished. District Sanitary Officers were placed under the Deputy Commissioners in all but strictly technical matters. Under this scheme, a District Sanitary Officer was posted to Kolar in 1911. In 1917, a full-time Sanitary Commissioner was placed as the head of the department. The post of Deputy Sanitary Commissioner was abolished. Again in 1923-24, in order to effect retrenchment, the posts of the full-time Sanitary Commissioner and the District Health Officers were abolished. The Senior Surgeon was entrusted with the duties of Sanitary Commissioner and a new cadre of Chief Sanitary Inspectors was created to take the place of District Sanitary Officers and to work directly under the orders of the presidents of District Boards.

**Sanitary  
service**

The first important step in the development of the health organisation in the district was taken in the year 1946, when a separate District Health Office was established in Kolar under the charge of a Health Officer. The District Health Officer took over charge of his office in August 1946 from the District Medical and Sanitary Officer who was in charge of both the curative and

**Establishment  
of District  
Health Office**

preventive services till then. Three Junior Health Inspectors of the Bureau of Epidemiology were posted to work in the Health Office in the year 1949. The personnel of the office was augmented from time to time to cope with the increase in work consequent on the implementation of the several developmental schemes under the successive Five-Year Plans. With the great importance that is being given to the family planning programme in recent years, the designation of the District Health Officer has been now changed into the District Health and Family Planning Officer.

**Re-organisation of the Department**

The Public Health and Medical Departments of the State 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 at the State level. The District Health and Family Planning Officer, Kolar, is in charge of the Public Health and Family Planning 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. His functions as a Family Planning Officer include propaganda on family planning, advice and distribution of contraceptives and conducting of camps for vasectomy operations and loop (I.U.C.D.) insertions. Since 1st June 1960, the District Health and Family Planning Officer is also in over-all charge of all the medical institutions at the taluk level in the district.

**Vital Statistics**

The registration of vital statistics was made compulsory in the district in a Government Order issued in December 1946. Births, deaths and other connected statistics are registered by the village Patels in rural areas and sent to the Registrar-General of Births and Deaths through the Tahsildars concerned. In the urban areas, the municipal authorities collect these statistics and send them to the Registrar-General. The Health Inspectors collect the statistics in the Health Unit areas, and during their visits to the villages, opportunity is taken to verify these figures with those registered by the village Patels and to have them reconciled.

Rise or fall in population can be directly attributed to a great extent to the condition of health of the people of a particular area. The epidemics, famine and distress may affect the size of population; migration of persons from one area to another also forms one of the causes for such increase or decrease. The

following table gives the variations in the total population of the district for the first six decades of this century :—

<i>Census Year</i>	<i>Total Population</i>	<i>Increase or decrease</i>	<i>Net Variation</i>
1	2	3	4
1901 .. ..	7,25,072	..	..
1911 .. ..	7,81,617	+56,545	..
1921 .. ..	7,93,878	+12,261	..
1931 .. ..	8,50,723	+56,845	..
1941 .. ..	9,72,916	+1,22,193	..
1951 .. ..	11,29,875	+1,56,959	..
1961 .. ..	12,90,144	+1,60,269	+5,64,072

The population of the district has increased by about 77.8 per cent during the 60-year period. In the decade 1951-61, the net increase of 1,60,269, the highest recorded during the previous five decades, is, by and large, attributable to a falling death-rate and a higher birth-rate.

The subjoined table indicates the total number of registered **Births and Deaths** in the district during the ten years from 1957 to 1966 as reported by the authorities concerned :—

<i>Year</i>	<i>Total number of births</i>	<i>Total number of deaths</i>
1957 ..	17,850	8,300
1958 ..	17,934	8,410
1959 ..	17,854	8,002
1960 ..	17,695	8,299
1961 ..	17,939	7,937
1962 ..	18,364	7,095
1963 ..	18,550	7,095
1964 ..	18,678	6,682
1965 ..	18,594	7,943
1966 ..	19,449	6,575

In recent years, the number of births is generally increasing, while the number of deaths is showing a downward trend. This is largely due to the intensive preventive and curative measures undertaken and the efficacy of modern drugs and better living conditions. There has been a systematic drive to control epidemics and a large number of people have been vaccinated and

inoculated. The birth and death rates, however, as reported fall much short of the known rates in India and this evidently shows that there are certain omissions in recording the vital events.

### Infant and maternal mortality

Infant mortality was high in the district in the year 1954, there being 1,273 cases out of a total number of 13,585 births. This has now been greatly reduced with the introduction of modern system of mid-wifery and the rapid implementation of maternity and child welfare schemes under the Plan programmes. In 1967, the number of infant mortality cases had come down to 857 out of a total number of 17,850 recorded births in the district.

In respect of maternal deaths, the highest number recorded in recent years in the district was 112 in 1958. This number had come down to 94 in 1962 and to 84 in 1966. This downward trend in maternal mortality is mainly due to the facilities provided for the pre-natal, natal and post-natal treatment in the several hospitals, maternity homes and health centres in the district. The establishment of a number of health units in the district with properly trained personnel has helped the people a great deal.

The sub-joined table shows the number of deaths caused by various epidemics and diseases in the district during the period from 1960 to 1966 :—

<i>Causes</i>	1960	1961	1962	1963	1964	1965	1966
1	2	3	4	5	6	7	8
Plague	.. 9	55	68	10	..	..	..
Small-pox	.. 69	24	51	3	3	3	13
Cholera	.. N.A.	N.A.	N.A.	39	36	14	42
Typhoid	.. 212	132	143	108	183	91	104
Other Fevers	.. 1,320	1,427	1,213	1,009	N.A.	1,989	1,163
Dysentery and diarrhoea.	.. 326	298	340	310	418	513	561
Respiratory diseases.	.. 484	401	475	381	367	357	357
Tuberculosis	.. 392	247	271	195	118	108	91
Leprosy	.. 36	29	37	52	31	40	32

N.A. — Not Available.

As is the case in the other parts of the State, 'other' fevers have been responsible for a large number of deaths in the district, followed by respiratory diseases and dysentery and diarrhoea.

### Common diseases

The statement on the next page indicates the various common diseases for which the majority of patients were treated in the several health unit dispensaries in the district during the period from 1960 to 1966. The figures reveal that the incidence of

respiratory diseases and fevers in the district is very high. Gastro-intestinal infections, diarrhoea and dysentery are also prevalent to a considerable extent. This is largely due to the insanitary environmental conditions and the unprotected water supply, especially in the rural areas. Under-nutrition and mal-nutrition also affect the poorer sections of the people as the district is often subject to scarcity conditions owing to failure of rains.

*Statement showing the common diseases for which a majority of patients were treated in the several health unit dispensaries in Kolar district from 1960 to 1966.*

Diseases	Number of patients treated						
	1960	1961	1962	1963	1964	1965	1966
1	2	3	4	5	6	7	8
Fevers ..	13,951	12,049	13,561	13,996	12,015	12,510	11,650
Pneumonia ..	1,501	1,563	1,487	1,438	1,492	1,356	1,373
Other respiratory diseases ..	23,411	23,194	24,514	24,516	23,340	23,106	24,156
Diarrhoea ..	11,917	12,066	10,615	10,582	10,367	11,696	12,491
Dysentery ..	1,063	967	935	854	873	984	807
Other digestive diseases ..	13,671	13,351	12,569	13,678	11,676	12,675	11,565
Anaemia ..	4,565	4,679	5,654	4,332	4,321	6,321	4,211
Worms ..	962	1,036	832	831	936	842	816
Ulcers ..	14,751	16,765	17,679	15,672	16,695	14,674	15,753
Other skin diseases ..	6,932	7,133	7,069	6,982	8,567	8,672	7,543
All other diseases ..	48,632	45,441	45,434	48,671	47,120	48,135	48,932

As in other districts of the State, cholera, small-pox and plague are the three diseases which, at times, assume epidemic proportions. The district has been free from plague since 1963. Small-pox is also on the decline in recent years, but cholera may be said to be still persisting in the district. When an epidemic breaks out in the district, the Health Inspectors and other health workers are alerted to work in close co-operation under the general direction of the District Health Officer. The Health Inspectors tour in the area in order to gain first hand knowledge of the extent and severity of the epidemic. All the wells in the area are thoroughly disinfected and the villagers are advised to isolate the sick and to evacuate the houses. People living in the infected area are vaccinated or inoculated and are advised against entertaining any relatives or friends. It is the duty of the Health Inspectors to enquire into and ascertain the causes of origin and spread of the epidemic within their jurisdiction and furnish periodical reports to the nearest Medical Officer and also

#### Epidemics

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. The table given below shows the number of attacks and deaths, in the district due to plague, small-pox and cholera during the period from 1960 to 1966 :—

Year	Plague		Small-pox		Cholera	
	Attacks	Deaths	Attacks	Deaths	Attacks	Deaths
1	2	3	4	5	6	7
1960 ..	41	9	403	69	} Figures not available	
1961 ..	480	55	131	24		
1962 ..	566	68	216	51		
1963 ..	94	10	8	3	85	39
1964 ..	6	..	13	3	88	40
1965 ..	..	..	92	23	50	14
1966 ..	..	..	134	13	123	52

### Plague

Plague was prevalent in the district almost every year upto 1963. The incidence was high during the years 1946, 1947 and 1948 and again during 1954 and 1955. Cyano-fumigation of rat-burrows and anti-plague inoculations were undertaken to control the disease. Insecticidal spraying of houses by Hexidol was also undertaken as a control measure from the latter half of 1952. Although the disease was on the decline from the year 1956, it broke out again in 1961 and recurred in 1962 taking a toll of 55 and 68 lives, respectively. As a result of the concerted efforts made by the district health authorities to combat this epidemic, the incidence was brought down considerably in 1963 and thereafter, the district was almost free from the ravages of this dreaded disease. The number of plague inoculations done during 1962 and 1963 were 43,576 and 11,394 respectively.

### Small-pox

Small-pox is persisting in the district, and there is no year in which the disease was completely absent. It has been a major health problem all along in the district. The incidence was heavy during the year 1949 with a gradual decrease in the following seven years. The incidence was again high during the years 1957, 1958 and 1960 in spite of the efforts made by the authorities concerned to combat this disease. The Government, therefore, set up an Expert Committee in 1959 to suggest ways



and means of eradicating both small-pox and cholera in the State. Based on the recommendations of the Committee, large-scale efforts were made through primary vaccination and subsequent planned periodical vaccination to bring the disease under control. A National Small-pox Eradication Programme was launched during 1963-64 and the vaccination programme was intensified throughout the district. As a result of these concerted efforts, the incidence of small-pox in the district has been greatly reduced in recent years.

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 stationed in the headquarters of each taluk. The vaccination work is carried on after a verification of birth registers. Systematic door-to-door inspection of the whole town or village is conducted for detection of unprotected cases. Each vaccinator is generally required to carry out not less than 3,000 vaccinations in a year. When epidemics occur, the vaccinators have to rush to the infected area and vaccinate all unprotected children and adults. All available staff are mobilised to do intensive vaccination work in that area. Re-vaccination, though not compulsory, is essential for protection against small-pox. The subjoined table indicates the primary and re-vaccinations done in the district during the period from 1960 to 1966 :—

<i>Year</i>	<i>No. of primary vac- cinations</i>	<i>No. of re-vac- cinations</i>	<i>Total</i>
1	2	3	4
1960	38,456	1,40,512	1,78,968
1961	41,689	1,55,675	1,97,364
1962	40,533	1,36,137	1,76,670
1963	9,326	97,128	1,04,454
1964	13,096	18,081	31,177
1965	59,918	1,70,398	2,30,316
1966	75,021	3,61,063	4,36,084

The district is not altogether free from the incidence of cholera, though it was not very high for several years in the recent past. There was, however, a heavy incidence of this disease in 1952 and 1953, the heaviest being in 1953, as famine conditions were then prevalent in the district. Subsequently, the infection was brought under control to a considerable extent by resorting to

**Cholera**

mass inoculations with the approved serum manufactured by the Mysore Serum Institute, Bangalore, blocking all contaminated sources of water and treating with chemicals all such water sources to destroy the infectious germs. The number of cholera inoculations done during the period from 1963 to 1966 was as follows : 1963 : 43,969, 1964 : 38,781, 1965 : 14,366 and 1966 : 11,485.

### Malaria

Kolar district has been generally considered to be free from malaria. An epidemic, however, had broken out in the year 1944, following a heavy rainfall. It started in Bagepalli taluk in May 1944 and spread to Chintamani, Malur, Mulbagal, Sidlaghatta, Bangarpet and Srinivaspur taluks. The disease was brought under control by a wide-spread use of the drugs. An epidemic again broke out in November 1953 in Gudibanda and Bagepalli taluks, reached its peak in April 1954 and then spread to Chintamani, Sidlaghatta, Chikballapur, Gauribidanur and Srinivaspur taluks. The epidemic was brought under control by the National Malaria Eradication Programme units working in the district. There has been no further epidemic out-breaks of this disease in the district since the year 1954.

In this connection, it may be of interest to note that malaria control work was in progress in Mysore State even much before the inception of the Five-Year Plans. The State had started a programme of research and training for eradication of malaria as far back as 1928. In the beginning, the malaria control operations were, however, confined to the *Malnad* areas which were highly endemic for malaria. Gradually, the services were extended to other areas also, including the district of Kolar. The programme was continued and improved during the successive Plan periods. There was no malaria control unit in this district till the year 1953. With the inauguration of the National Malaria Control Programme in the State in 1953, certain parts of the district were included for D. D. T. spraying in the Bangalore National Malaria Control Unit. In the year 1955, two sub-units of the National Malaria Control Unit were located at Chikballapur and Kolar, under the administrative control of the District Health Officer, and they covered a population of 5,16,608. The Kolar sub-unit covered the five taluks of Kolar, Malur, Mulbagal, Bangarpet and Srinivaspur, while the Chikballapur sub-unit covered the remaining six taluks of Sidlaghatta, Chikballapur, Gauribidanur, Gudibanda, Bagepalli and Chintamani. One independent National Malaria Control Unit was sanctioned for the district in the year 1957 with four sub-units at Kolar, Srinivaspur, Chikballapur and Gauribidanur. The Malaria Control Programme was switched over to the Eradication Programme from 1st April 1958. The entire district, including the Kolar Gold Fields, was covered with D.D.T. spraying.

since 1st March 1959. The spraying programme was intensified and surveillance work was introduced. During 1959-60 and 1960-61, as many as 3,50,942 and 3,80,316 houses respectively were sprayed with D.D.T. (including both the first and second round sprayings). From April 1962, the programme entered the Consolidation Phase and from October 1964, it entered the Maintenance Phase. 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. As a result of all these sustained anti-malarial measures, the disease has almost been rooted out in the district. The malaria maintenance work has now been merged with the general health services.

A survey was undertaken in the district in the year 1956 **Leprosy** by the district health authorities to assess the number of villages infected with leprosy, and to arrange for the treatment of the lepers. The following table indicates the number of infected villages and the number of cases in each taluk of the district as revealed by that survey :—

<i>Sl. No.</i>	<i>Name of taluk</i>	<i>No. of infected villages</i>	<i>No. of cases</i>
1	2	3	4
1.	Kolar ..	14	21
2.	Malur ..	36	72
3.	Srinivaspur ..	38	53
4.	Mulbagal ..	54	144
5.	Chintamani ..	18	26
6.	Sidlaghatta ..	26	55
7.	Bangarpet ..	19	30
8.	Gauribidanur ..	29	87
9.	Chikballapur ..	35	66
10.	Gudibanda ..	1	1
11.	Bagepalli ..	3	7
Total ..		253	562

A Leprosy Control Centre was established at Gauribidanur in the year 1959 and this centre conducted a detailed survey of 27 villages in the taluk covering a population of 32,556 ; 331 cases were detected and of these, 250 cases were taken up for regular domiciliary treatment and followed up. The centre is headed by a Medical Officer, a Medico-Social Worker, a Non-Medical Assistant, 4 Compounders and some ministerial and class IV staff. A vehicle with a driver and a cleaner has also been sanctioned

to the centre. The number of leprosy cases treated at this centre during the period from 1962 to 1966 was as follows :—

<i>Year</i>			<i>Cases treated</i>
1962	..	..	626
1963	..	..	630
1964	..	..	638
1965	..	..	670
1966	..	..	807

**Primary  
Health  
Centres**

The progress achieved in the establishment of health centres and units in the rural areas of the district is impressive. The first health unit was started in the district at Budikote in Bangarpet taluk in the year 1956. Since then, almost every year new health units have been started in the various parts of the district. The table given below furnishes the particulars of health centres and units started during each year of the Second and Third Plan periods in the district :—

<i>Year</i>	<i>No. of Health Units/ Centres started</i>	<i>Place of location</i>
1	2	3
1955-56 ..	1	Budikote, Bangarpet taluk.
1956-57 ..	3	(1) Sidlaghatta (2) Melur (3) Ganjigunte
1957-58 ..	7	(1) Sadali (2) Jangankote (3) Basettihally (4) Srinivasapur (5) Yeldur (6) Mulbagal (7) Malur
1958-59 ..	1	Bagepalli
1959-60 ..	1	Bathalahalli, Chintamani taluk
1960-61 ..	3	(1) Gudibanda (2) Dibbur, Chikballapur taluk (3) Koorgepally, Srinivasapur taluk.
1961-62 ..	1	Vokkaleri, Kolar taluk
1962-63 ..	2	(1) Sugatur, Kolar taluk (2) Kamasandra, Bangarpet taluk.
1963-64 ..	Nil	
1964-65 ..	4	(1) Kyasamballi, Bangarpet taluk (2) Kaivara, Chintamani taluk (3) Namagondlu, Gauribidanur taluk (4) Thondebhavi, Gauribidanur taluk.

Thus, there are at present 23 primary health centres/units in the district. Of the 23 primary centres, 8 are of the erstwhile Mysore pattern and the rest are of the Government of India-type. The health units of the Mysore pattern cover a population of 10,000 to 15,000 and each unit has a staff of one Assistant Medical Officer of Health, one Senior Health Inspector or two Junior Health Inspectors, three Midwives and one Compounder besides some class IV staff. The primary health centres of the Government of India-type each covers a population of 60,000 and comprises of a staff of one Medical Officer of Health, one Junior Health Inspector, one Health Visitor or Auxiliary Nurse, one Compounder and four Midwives besides some class IV 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, health surveys, proper sanitary arrangements in connection with fairs and festivals and supply of drugs and diet supplements to the rural population.

A laboratory, to provide facilities at the district level to the medical practitioners and medical institutions, was established at Kolar in the year 1958. The staff of the laboratory consisted of a Medical Officer, two Senior Laboratory Technicians, two Junior Laboratory Technicians and four laboratory attendants. In addition to the examination of pathological specimens, bacteriological examinations are also taken up in the laboratory.

**District  
Laboratory**

The Family Planning Programme has assumed great importance in recent years because of the abnormal increase in population and the need for checking it. A State Family Planning Board has been functioning in the State since the year 1957. There is a District Family Planning Committee at Kolar consisting of both official and non-official members for implementing the family planning programme in the district. The family planning activities comprise mainly family planning services, training of workers and educating the public about the needs and methods of family planning.

**Family  
Planning**

Facilities have been provided in all bigger medical institutions in the district for sterilisation operations, free of cost, both for men and women. In order to popularise these surgical methods of family planning, the services of private medical practitioners are also utilised on payment of a subsidy of Rs. 25 per operation. Vasectomy camps are organised in the taluk headquarters, in the medical and primary health centre dispensaries and also in villages. Medical advice on the methods of family planning is provided to married persons, who require such advice, and also to those women, who, in the opinion of the medical officer, cannot

undergo the strain of pregnancy and parturition without danger to health. Besides, the primary health centres in the district conduct couple surveys and selected couples are advised, through individual contacts, to adopt temporary or permanent family planning methods. Enough quantities of oral contraceptives including the intra-uterine contraceptive device or the loop, which has become increasingly popular in recent years, have been supplied to all the family planning centres, hospitals and dispensaries in the district for distribution among the people. Intensive propaganda through lectures, film shows, exhibitions, publicity literature, etc., is done throughout the district to educate the public in respect of family planning. In addition, a family planning fortnight is organised every year throughout the district, when as many people as possible are covered under the programme.

There were two urban and fifteen rural family planning centres in the district in 1967. The urban centres were located at Kolar and Kolar Gold Fields, while the rural centres were located at other places. Besides, there was also a mobile unit working at Kolar. During the period from 1964 to 1967, in all, 5,100 sterilisation operations were performed and 8,708 loop placements were done in the district. Besides, 12,801 contraceptives, such as jellies, diaphragms and niroids were distributed among interested couples.

#### **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 personal cleanliness and environmental sanitation. The department also arranges for the celebration of the World Health Day, Anti-Fly Week, Leprosy Day, Family Planning Fortnight 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 and exhibitions stressing the importance of following sanitary principles and taking preventive measures are also arranged.

#### **Allopathic Dispensaries**

As already stated earlier, in accordance with a decision taken by the State Government in May 1960, all the medical institutions at the taluk level were transferred to the control of the District Health Officer. Thus, in 1967, there were in all 52 allopathic dispensaries in the district under the charge of the District Health Officer. Of these, four were combined dispensaries with a separate women's section for looking after maternity cases. In many of the dispensaries, a few beds—ranging from two to six—have been provided for emergency cases. Many of these dispensaries are maintained by the local bodies. The staff attached

to a dispensary generally consists of a Medical Officer, a compounder and a midwife. In the case of a combined dispensary, besides the above mentioned staff, there is generally a lady doctor, a lady compounder and two midwives. A statement showing the number and location of dispensaries and primary health centres/units taluk-wise, as also the total number of cases treated by each of the institutions during the years 1961-62 and 1965-66, is given at the end of the chapter.

There were in all twenty-three Ayurvedic dispensaries and eight Unani dispensaries located in important places in the district. The District Board, which was in existence till May 1960, was paying annual grants to these dispensaries and thereafter, the Taluk Development Boards are maintaining these dispensaries. A list of the Ayurvedic and Unani dispensaries in the district is given at the end of the chapter.

**Ayurvedic  
Dispensaries**

There are two District Surgeons in the Kolar district, one at Kolar and the other at the Kolar Gold Fields. The District Surgeon, Kolar, is in charge of the Narasimharaja Hospital, Kolar, while the District Surgeon, Kolar Gold Fields, is in charge of the Civil Hospital at Robertsonpet. He is also in over-all charge of the Maternity Hospital at the Kolar Gold Fields, which is headed by a Medical Officer. Both these District Surgeons are directly responsible to the Director of Health Services in Mysore, Bangalore. Besides these major hospitals, there is another major hospital and medical service run by the Kolar Gold Mining Undertakings for the benefit of their employees in the mining area. There is also a Tuberculosis Sanatorium at Kolar, headed by a Superintendent, who is also directly responsible to the Director of Health Services. A brief account of each of these major medical institutions in the district is given below.

**District  
Surgeons**

Prior to the housing of this District Headquarters Hospital in an imposing new building near the Travellers' Bungalow at Kolar, the hospital had been located in a building on the Bangalore—Madras road. His Highness the late Yuvaraja Kanthirava Narasimharaja Wodeyar of Mysore laid the foundation-stone on 11th December 1935 for the new building and His Highness the late Sri Krishnaraja Wodeyar IV performed the opening ceremony of the new building on 13th December 1937. Since then, the hospital is called Sri Narasimharaja Hospital. At that time, the hospital had a bed-strength of 45. It was later raised to 80. In 1963, it was further raised to 145.

**Sri Nara-  
simharaja  
Hospital,  
Kolar**

The hospital has been extending medical facilities to an increasing number of people over the years. The subjoined

table indicates the details of patients treated in this hospital during the period from 1960 to 1966 :—

Year	Out-patients treated	In-patients treated	Operations conducted		Labour cases conducted	X-Ray cases		
			Major	Min		Radio-gram	Barium	Screening
1	2	3	4	5	6	7	8	9
1960	80,765	30,365	89	618	365	110	15	1,844
1961	90,687	34,363	110	450	468	278	30	1,402
1962	95,784	32,465	88	385	433	217	61	1,285
1963	1,30,680	35,060	314	710	540	209	270	1,260
1964	1,32,425	40,765	156	696	506	280	260	1,268
1965	1,53,654	42,763	168	636	588	255	205	1,249
1966	1,60,985	43,920	202	887	575	315	360	1,984

The hospital has four wings, *viz.*, maternity wing, surgical wing, medical wing and children's wing. A clinic for the treatment of venereal diseases was attached to this hospital in 1959. The hospital is equipped with an X-ray unit consisting of a 100 MA X-ray plant and a laboratory section. It has ambulance van facilities and also facilities for training compounders and auxiliary nurse-midwives. During 1967, 12 compounders and 23 auxiliary nurse-midwives were undergoing training in this hospital. A Family Planning Clinic had also been attached to this hospital prior to 1964. In July 1964, it was upgraded into an Urban Family Planning Centre. This Centre, which is working under the overall guidance and control of the District Surgeon, Kolar, has rendered advice on family planning to 3,113 persons. Besides, it had conducted 251 vasectomy and 44 tubectomy operations upto the end of 1966. A total of 610 intra-uterine contraceptive device placements had also been done. Further, on the advice of this Centre, about 200 persons had taken up conventional contraceptive methods.

Apart from the District Surgeon, who is the head of the hospital, the staff of this hospital consists of a Resident Medical Officer, a Lady Medical Officer, three Grade I Assistant Surgeons, seven Grade III Assistant Surgeons, one II Grade Nursing Superintendent, 15 Nurses, three Compounders, two Midwives, two Laboratory Technicians, one X-ray Technician, six ministerial staff and 45 class IV staff. Besides, there is one Medical Officer, one Extension Educator and three Welfare and Social Workers attached to the Urban Family Planning Centre, Kolar, and one



Sister-Tutor, one Nurse, one House-keeper and a few class IV servants attached to the Auxiliary Nurse-Midwives' Training Centre, Kolar.

The total expenditure incurred on this hospital during 1966-67 was Rs. 3,55,550.

The Kamala Nehru Tuberculosis Sanatorium, Kolar, was established in the year 1959. It is situated on the K.G.F. road on an elevated landscape with a vast area of 33 acres round about. At the beginning, it had a bed-strength of 160, 80 for male and 80 for female patients. The daily average number of in-patients treated during the year 1960 was 90.7 while the daily average number of out-patients treated was 9.3. By 1967, this number had increased to 180.8 and 38.2 respectively. The total number of in-patients and out-patients treated during 1960 was 392 and 3,422 respectively, while in 1967, the number had increased to 938 and 14,051 respectively. The bed-strength of the Sanatorium was raised to 204 by 1965, by the addition of a paying ward of 24 beds in 1964 and a children's ward of 20 beds in 1965. The Sanatorium has been provided with a laboratory, an X-ray plant and an operation theatre and has facilities for treating both indoor and out-door patients. The staff of the institution consisted of one Surgeon, three Assistant Surgeons, one Nursing Superintendent, two Nuns, one Secretary, 18 Nurses, one X-ray Technician, one Laboratory Technician, one Compounder besides five ministerial and 48 class IV staff. The total expenditure incurred on this Sanatorium during 1966-67 was Rs. 2,97,405.

**K. N. Sanatorium, Kolar**

The Civil Hospital at Robertsonpet, Kolar Gold Fields, was established in 1914. The bed-strength of the hospital in 1960 was 71 and it was raised to 100 by 1965. The average number of in-patients treated in the hospital in 1965-66 was 82.37 per day while the average number of out-patients treated during the year was 414.63. The number of major operations performed was 82 while the number of minor operations done was 1,718. Nearly 430 X-ray examinations were made during this period, and 3,141 cases of fluoroscopy were attended to. A total of 1,441 dental cases were also treated and about 150 eye operations were performed during the same period. The staff of the hospital consisted of one Surgeon, *i.e.*, the District Surgeon, Kolar Gold Fields, eleven Assistant Surgeons (Class I and III), one II Grade Nursing Superintendent, 8 Nurses, one X-ray Technician, one Laboratory Technician and 3 Compounders besides ministerial and class IV staff. The hospital also had three Honorary Assistant Medical Officers, one to look after general cases, one for treating eye cases and the third to look after dental cases.

**Civil Hospital, K.G.F.**

The total expenditure incurred on this hospital in 1966-67 was Rs. 1,86,900.

**Maternity  
Hospital,  
K. G. F.**

The Maternity Hospital, Kolar Gold Fields, had only 36 beds in 1960 which was increased to 65 by 1966. The daily average number of in-patients treated in the institution in 1966 was 53.3 and that of out-patients was 125.9. The number of major and minor operations performed during the year was 42 and 404 respectively. The hospital is manned by a Lady Medical Officer (Assistant Surgeon, Grade II), three Assistant Surgeons Grade III, one Nursing Superintendent Grade II, eight Nurses, six Midwives and two Compounders, besides ministerial and class IV staff. A total expenditure of Rs. 2,11,742 was incurred on this hospital in 1966-67. There is also an Epidemic Diseases Hospital in Kolar Gold Fields under the charge of a Medical Officer. The expenditure incurred on this hospital in 1966-67 was Rs. 25,653.

Both the Maternity and Epidemic Diseases Hospitals are attached to the Civil Hospital, Kolar Gold Fields, and, as such, are under the over-all supervision and control of the District Surgeon, Kolar Gold Fields.

**K. G. M. U.  
Hospital**

The Kolar Gold Mining Undertakings Hospital and Medical Service which made a humble beginning some eighty years ago, has now grown into a large, modern, well-equipped establishment with in-patients' wards containing 240 beds, three X-ray apparatuses, three operation theatres, an iron lung, a bacteriological and pathological laboratory and two separate dispensaries for families of workers. The medical establishment is headed by a Chief Medical and Sanitary Officer, ten doctors, a matron, 31 sisters and nurses, 34 technical and administrative staff and 156 others. While the main hospital extends free medical and surgical service to more than 25,000 persons annually, the two dispensaries cater to the needs of the dependants of workers numbering about 60,000. The number of major and minor operations performed in the hospital during 1965-66 was 466 and 2,424 respectively. On an average about 1,800 out-patients were being attended to daily—1,000 at the main hospital and 400 at each of the two dispensaries.

The two dispensaries for families of workers are each manned by a Lady Medical Officer, who is assisted by the doctors from the main hospital. These dispensaries provide free out-patient treatment facilities, while in-patient facilities are available in the main hospital itself. There are also four free maternity clinics, staffed with qualified midwives and health visitors for the benefit of the families of the employees. In order to further extend

medical facilities to the dependants of the employees, a new out-patient block at an estimated cost of rupees five lakhs and a new 50-bed ward are being provided at the main hospital. All these medical institutions are run entirely by the Kolar Gold Mining Undertakings.

There are no arrangements to render specialised treatment in any Government medical institution in the district except for tuberculosis, for which adequate provision is made in the Kamala Nehru T. B. Sanatorium, Kolar. As regards ear, nose and throat ailments, as also eye diseases, specialists from Bangalore pay periodical visits to the Sri Narasimharaja Hospital, Kolar, and the Civil Hospital, Kolar Gold Fields, to render necessary relief to the sufferers. The operation theatres attached to these hospitals are made use of by the specialists for the purpose.

**Specialist  
services**

There are two well-known private hospitals in the district which are rendering useful service to the suffering public. They are the Church of South India Hospital, Chikballapur, and the Ellen T. Cowen Memorial Hospital, Kolar.

**Private  
medical  
institutions**

*Church of South India Hospital, Chikballapur.*—This hospital was established in the year 1913 by the London Missionary Society, under the name of Wardlaw Thompson Hospital. The name of the institution was changed, in the year 1954, to Church of South India Hospital. This hospital is under the control of the Mysore Diocese of the Church of South India. There is provision for 111 beds in this institution. The number of in-patients treated in the year 1965-66 was 2,122 while the daily average of out-patients treated was 100. The number of operations performed in the hospital during the year was 894, the number of X-ray examinations conducted being 834 and fluoroscopy cases 1,627. The hospital is under the charge of a Medical Superintendent with a staff of four doctors, 17 nurses, six mid-wives and five para-medical workers.

*Ellen T. Cowen Memorial Hospital, Kolar.*—This institution is under the charge of an Administrator. In 1966, there was provision for 210 beds in this hospital. The daily average number of in-patients in the hospital during 1966 was 143.6 while the average number of out-patients treated was 114.5. The number of major and minor operations performed during this period was 1,278 and that of X-ray and fluoroscopic examinations 2,114. Besides, over 52,000 laboratory investigations were also conducted during the year. The hospital is manned by a staff consisting of an Obstetrician and Gynaecologist, one Paediatrician, one Physician, one Surgeon, one Anaesthetist, three other doctors, a Nursing Director, an Assistant Nursing Director, six Sisters, 30 Staff Nurses and one Public Health Nurse, six

Pharmacists, one Dietician, five Laboratory Technicians and 18 ministerial and 83 class IV staff. The hospital receives an annual grant of Rs. 3,000 from the Government.

**Medical Practitioners**

According to the census report of 1951, the number of doctors, *Vaidyas* and *Hakims* in the district was 186, of whom 172 were males and 14 females. This number had considerably increased by 1961 and the census report of 1961 has revealed that there were, in all, 435 medical practitioners in the district including physicians, surgeons and dentists (allopathic, ayurvedic, unani and homeopathic). Of these, 393 were males and 42 females. More than half of these lived in the urban areas of the district. These figures included also those who were working in Government and semi-Government medical institutions.

**Particulars of Medical Institutions under the control of the District  
Health Officer in Kolar District as in 1961-62 and 1965-66**

Name of Taluk	Sl. No.	Name and location of the institution	Total number of cases treated during the year	
			1961-62	1965-66
1	2	3	4	5
Kolar	1	Municipal Dispensary, Kolar	90,309	1,01,860
	2	Local Fund Dispensary, Holur	8,616	6,366
	3	Local Fund Dispensary, Jodichamarahalli.	4,203	6,636
	4	Local Fund Dispensary, Kyalanur.	28,336	15,886
	5	Local Fund Dispensary, Narasapur.	11,305	10,248
	6	Primary Health Centre, Sugatur	4,788	15,220
	7	Primary Health Centre, Vokkaleri.	4,540	15,635
	8	Local Fund Dispensary, Vemagal	16,156	19,692
Bangarpet	1	Combined Dispensary, Bangarpet.	72,345	53,194
	2	Public Works Department Dispensary, Bethamangala.	20,619	13,922
	3	Local Fund Dispensary, Andersonpet, K.G.F.	32,288	39,453
	4	General Dispensary, Champion Reef.	31,504	20,976
	5	Hut Dispensary, Oorgaum ..	..	15,301
	6	Primary Health Unit, Budikote.	16,251	10,303
	7	Primary Health Centre, Kamasandra.	..	14,078
	8	Primary Health Centre, Kyasamballi.	..	15,059
Srinivasapur	1	Local Fund Dispensary, Addagal	9,107	11,469
	2	Local Fund Dispensary, Gownapalli.	7,467	7,741
	3	Local Fund Dispensary, Ronur	7,887	5,286
	4	Local Fund Dispensary, Lakshmipur.	9,545	6,317
	5	Local Fund Dispensary, Royalpad.	13,295	7,669
	6	Primary Health Centre, Koorgepalli.	22,813	6,903
	7	Primary Health Unit, Srinivasapur.	36,755	28,936
	8	Primary Health Unit, Yeldur	20,594	7,360
Mulbagal	1	Primary Health Centre, Mulbagal.	28,083	39,827
	2	Local Fund Dispensary, AVani	17,512	9,638

1	2	3	4	5	
Mulbagal	3	Local Fund Dispensary, Devarayasamudra.	18,244	13,674	
	4	Local Fund Dispensary, Hebbani.	18,341	9,555	
	5	Local Fund Dispensary, Koladevi.	7,733	5,446	
	6	Local Fund Dispensary, Nangli	22,035	12,927	
	7	Local Fund Dispensary, Thayalur	17,519	17,159	
	8	Local Fund Dispensary, Uttanur	8,145	8,763	
	9	Local Fund Dispensary, Byrakur	..	8,820	
	Malur	1	Primary Health Centre, Malur	48,926	50,78
		2	Local Fund Dispensary, Tekal	9,161	13,922
3		Local Fund Dispensary, Lakkur	10,741	6,830	
4		Local Fund Dispensary, Masti	19,173	9,643	
Chikballapur	1	Combined Hospital, Chikballa- pur.	48,155	44,008	
	2	Local Fund Dispensary, Mandikal.	8,639	6,858	
	3	Local Fund Dispensary, Peresandra.	9,484	4,425	
	4	Primary Health Centre, Dibbur	7,911	4,988	
	5	Seasonal Dispensary, Nandi Hills.	..	..	
	6	Maternity Home, Kandavara	..	..	
Chintamani	1	Combined Hospital, Chintamani	1,25,465	52,939	
	2	Local Fund Dispensary, Iragampalli.	13,171	12,084	
	3	Local Fund Dispensary, Burudagunte.	19,442	8,563	
	4	Primary Health Centre, Kaivara.	18,008	13,833	
	5	Primary Health Centre, Bathalahalli.	..	16,084	
	6	Mobile Dispensary, Chintamani	..	..	
Gauribidanur	1	Combined Dispensary, Gauribidanur.	47,557	33,603	
	2	Local Fund Dispensary, Allipur	19,116	10,062	
	3	Local Fund Dispensary, Darinayakanapalya.	10,040	11,514	
	4	Local Fund Dispensary, Hosur	11,169	9,478	
	5	Local Fund Dispensary, Idagur	8,144	10,543	
	6	Local Fund Dispensary, Manchenahalli.	8,236	20,736	
	7	Local Fund Dispensary, Vatadahosahalli.	5,501	6,616	
	8	Local Fund Dispensary, Nagaragere.	10,040	7,066	
	9	Primary Health Centre, Thondebhavi.	..	10,313	
	10	Primary Health Centre, Namagondlu.	..	12,001	

1	2	3	4	5
Gudibanda	1	Primary Health Centre, Gudibanda.	..	20,416
	2	Local Fund Dispensary, Beechaganhalli.	..	12,366
	3	Local Fund Dispensary, Hampasandra.	..	13,743
Bagepalli	1	Local Fund Dispensary, Chakavelu	17,015	7,204
	2	Local Fund Dispensary, Chelur	8,492	7,088
	3	Local Fund Dispensary, Gudur	7,582	10,318
	4	Local Fund Dispensary, Marganakunte.	13,425	6,030
	5	Local Fund Dispensary, Pathapalya.	14,927	11,904
	6	Primary Health Centre, Bagepalli.	29,109	26,649
	7	Local Fund Dispensary, Julupalya.	..	6,328
Sidlaghatta	1	Primary Health Centre, Sidlaghatta.	46,489	32,594
	2	Primary Health Unit, Ganjigunte	9,275	5,769
	3	Primary Health Unit, Sadali ..	8,946	6,926
	4	Primary Health Unit, Basettihalli.	7,403	9,159
	5	Primary Health Unit, Jangankote.	15,095	10,378
	6	Primary Health Unit, Melur ..	13,048	12,267

**List of Ayurvedic and Unani Dispensaries maintained by the  
Taluk Development Boards in Kolar District as in 1966-67**

*Kolar Taluk :*

- |                |    |    |                      |
|----------------|----|----|----------------------|
| 1. Vokkaleri   | .. | .. | Unani Dispensary     |
| 2. Mullahalli  | .. | .. | Ayurvedic Dispensary |
| 3. Thambihalli | .. | .. | Unani Dispensary     |

*Malur Taluk :*

- |                 |    |    |                      |
|-----------------|----|----|----------------------|
| 1. Shivarapatna | .. | .. | Ayurvedic Dispensary |
| 2. Thoranahalli | .. | .. | Unani Dispensary     |
| 3. Thoralakki   | .. | .. | Unani Dispensary     |
| 4. Rajenahalli  | .. | .. | Unani Dispensary     |

*Mulbagal Taluk :*

- |               |    |    |                      |
|---------------|----|----|----------------------|
| 1. Mudiyanur  | .. | .. | Ayurvedic Dispensary |
| 2. Gudipalli  | .. | .. | Ayurvedic Dispensary |
| 3. Kurudumale | .. | .. | Unani Dispensary     |

*Bangarpet Taluk :*

- |               |    |    |                      |
|---------------|----|----|----------------------|
| 1. Kamasandra | .. | .. | Ayurvedic Dispensary |
|---------------|----|----|----------------------|

*Gudibanda Taluk :*

- |                |    |    |                      |
|----------------|----|----|----------------------|
| 1. Chendur     | .. | .. | Ayurvedic Dispensary |
| 2. Hampasandra | .. | .. | Ayurvedic Dispensary |

*Srinivasapur Taluk :*

- |                    |    |    |                      |
|--------------------|----|----|----------------------|
| 1. Dalasanoor      | .. | .. | Ayurvedic Dispensary |
| 2. Somayajalapalli | .. | .. | Ayurvedic Dispensary |
| 3. Ronur           | .. | .. | Unani Dispensary     |
| 4. Thodigallu      | .. | .. | Ayurvedic Dispensary |

*Chintamani Taluk :*

- |                     |    |    |                        |
|---------------------|----|----|------------------------|
| 1. Burudagunte      | .. | .. | Ayurvedic Dispensary   |
| 2. Santhekallahalli | .. | .. | Ayurvedic Dispensary   |
| 3. Yagavakote       | .. | .. | Ayurvedic Dispensary   |
| 4. Chintamani       | .. | .. | Homeopathic Dispensary |

*Sidlaghatta Taluk :*

- |           |    |    |                  |
|-----------|----|----|------------------|
| 1. Chagle | .. | .. | Unani Dispensary |
|-----------|----|----|------------------|

*Bagepalli Taluk :*

- |               |    |    |                      |
|---------------|----|----|----------------------|
| 1. Billur     | .. | .. | Ayurvedic Dispensary |
| 2. Nagaragere | .. | .. | Ayurvedic Dispensary |
| 3. Puligol    | .. | .. | Ayurvedic Dispensary |
| 4. Mittemari  | .. | .. | Ayurvedic Dispensary |

*Gauribidanur Taluk :*

- |                    |    |    |                      |
|--------------------|----|----|----------------------|
| 1. Hudugur         | .. | .. | Ayurvedic Dispensary |
| 2. Nagarkere       | .. | .. | Ayurvedic Dispensary |
| 3. Vatadahosahalli | .. | .. | Ayurvedic Dispensary |
| 4. Vidurashwatha   | .. | .. | Ayurvedic Dispensary |

*Chikballapur Taluk :*

- |                |    |    |                      |
|----------------|----|----|----------------------|
| 1. Sultanpet   | .. | .. | Ayurvedic Dispensary |
| 2. Nandi Hills | .. | .. | Ayurvedic Dispensary |