

CHAPTER XVI

MEDICAL AND PUBLIC HEALTH SERVICES

Early history

THE Ayurvedic system of medicine was the system that was practised all over India from the earliest times. It had its roots in the concepts, climate, vegetation, etc., of the country. It appears to have become a part of Sanskrit learning and was taught in many of the Sanskrit institutions. The Ayurvedic doctors were noted for their sound knowledge of the medicinal properties of the many plants and herbs. A good Ayurvedic practitioner was capable of giving relief to his patients with the help of herbs and plants commonly available in the villages, without having to depend on costly drugs. The Muslims brought the system of treatment called Unani practised by the *hakims*. They did not penetrate into the rural areas, their practice being generally confined to the urban areas. They enjoyed not only the patronage especially of the Muslim aristocracy, but also of some Hindus. The *vaidyas* continued their practice of Ayurveda both in the urban and the rural areas and the common people had great faith in them. Even now, a considerable number of people in the rural as well as urban areas continue to be served by indigenous systems of medicine, Ayurveda and Unani.

With the increasing contact with the East India Company and the British Officers, the Western Allopathic system of medicine came into vogue in India. Having regard to the fact that Bellary district constituted a part of the old Madras Presidency for quite a long period, it may not be out of place to trace the background and narrate briefly the various steps taken by the Government of Madras in public health matters in the area.

Beginning of public health services

During the early years of the occupation of India by the British, the necessities of war usually determined the sites of military encampments. These, in course of time, became permanent military cantonments, but little attention was paid in the beginning to the sanitary question in the selected localities. It was noticed that at these stations the mortality among the military and other officers far exceeded that of the community

residing beyond military limits. It was also observed that an epidemic, which broke out in such localities, often maintained an existence in them for a period exceeding its course elsewhere. These circumstances induced the British Parliament in 1859 to nominate a Royal Commission to enquire (1) into the classes of diseases and the rates of sickness, mortality and invaliding amongst the Europeans and native troops in India, (2) into the causes giving rise to disease whether relating to climate or locality, faultiness in barracks, drainage, water supply, diet, drink, dress, duties and habits of troops, (3) into the existing unhealthy military cantonments and the remedies required to improve their sanitary conditions, as also into the question of sanatoria and hill stations generally with a view to future occupations, (4) into the best construction of barracks, hospitals, huts and tents for India and (5) into the best means of enforcing medical and sanitary rules. The Royal Commission, which closed their enquiry in 1863, urged, amongst other recommendations, the appointment of local commissioners of public health in order to ensure the gradual introduction of sanitary improvements. Sanitary commissions were accordingly appointed in the three presidencies of Bengal, Madras and Bombay in 1864 and, were so constituted as to represent the various points of view from which the subject had to be considered, civil, military, medical and engineering. Their duties were partly consultative and partly administrative. They were to give advice and assistance in all matters relating to public health, such as selection of new stations and the sanitary improvement of existing stations and bazaars, to examine new plans for barracks and hospitals, to advise on the laying out of stations and bazaars, the sanitary improvement of native towns and prevention and mitigation of epidemic diseases, to exercise generally a constant 'oversight' on the sanitary condition of the population, European and native, and to report on the prevalence, causes and means of prevention of sickness and disease. In April 1864, the Sanitary Commission in Madras was formed, consisting of a president and four members, one of whom was the Secretary. The first president was an officer of the Civil Service, and an officer of the Royal Engineers, two medical men and a military officer were appointed as members.

The Commission thus constituted was in existence till 1866 when a reorganisation took place from 1st May of that year; the permanent members were dispensed with and the duties which were being performed by the Commission began to be carried out by a Sanitary Commissioner aided by a medical officer as Secretary. When, however, it seemed desirable for consideration of any particular subject, civil, military and medical officers, best acquainted with the subject, were associated with the Sanitary Commissioner. Originally, the duties of the Sanitary Commissioner were chiefly of a military character. In fact, the

appointment was created mainly with a view to military requirements and was directly associated with the military department, all communications with the Government being submitted through the military secretary and all the expenses of the department being included in the military budget. The civil portion of the Commissioner's duties, however, having gradually increased, it was decided in 1869 that he should thence-forward be attached to the civil department and all expenses connected with the appointment should be transferred to the civil budget. This transfer took place on the 1st April 1869. In the same year, on the death of the secretary to the Sanitary Commissioner, the secretary-ship was abolished. The Sanitary Commissioner had now to deal with the health of the Presidency at large, and his duties lay mainly with the civil branch of the administration. Although the appointment was now purely a civil one, sanitary questions connected with the army were still referred to the Sanitary Commissioner. In 1875, the supervision and control of the vaccination section was transferred from the Medical to the Sanitary Department. Later on, in August 1899, a Sanitary Board for the Presidency was formed consisting of the Sanitary Commissioner and a Sanitary Engineer. They were to work in concert with the District Collectors for the purpose of planning or carrying out any particular sanitary work or works in the collectorates.

**Registration of
births and
deaths**

From 1897, the Government had under consideration various proposals for the improvement of registration of vital statistics in rural areas. The result was the passing of the "Madras Registration of Births and Deaths Act of 1899". Registration of births and deaths became compulsory in rural areas after notification by Government. Provision was made for the appointment of registrars and for the granting of extracts from the registers free of charges. Now more attention was paid to the subject of correct registration by the Revenue Department and material aid in this respect was given by Deputy Inspectors of Vaccination, District Medical and Sanitary Officers and the Sanitary Commissioner's office. The Act was made applicable to Bellary district in the same year it was passed, *i.e.*, 1899.

With the implementation of the Montague-Chelmsford Reforms in 1919, sanitation and public health became a transferred subject under the control of the Minister in-charge of the Local Self-Government Department. The designation of the Sanitary Commissioner was changed to Director of Public Health and the Sanitary Department was thence-forward to be called the Public Health Department. Similar changes were made in the designations of Deputy Sanitary Commissioners who were to be known as Assistant Directors of Public Health. The public health service in the modern sense of the term began in Bellary district in 1923 when it got a full-fledged district health organisation. In 1939,

the Madras Public Health Act was passed, and was enforced in the district. On the creation of the Andhra State in 1953, seven out of ten taluks of Bellary district were included in the Mysore State.

Like most dry areas, the district is, on the whole, a healthy one. Though its temperature is high in the three hottest months, from April to June, it enjoys a pleasant weather in the other months and the climate of the south-western taluks resembles that of the Mysore plateau adjoining them.

The patel of the village has been mainly responsible for the registration of all births and deaths in the village. (Formerly, in the case of large villages, where there was a *monigar* or assistant *karnam* or both, the work was being distributed among these village officials). **Vital Statistics**

In the towns, the town panchayats and municipalities have to maintain birth, death and other related statistics. The patels of villages and the urban local bodies have to send this information to the Registrar-General of Births and Deaths through the Tahsildars of taluks concerned. The health inspectors collect these statistics in respect of health unit areas and during their visits to villages, opportunity is taken by them to verify the figures registered by the village patels. Until recently, the Directorate of Health Services was in over-all charge of compilation and maintenance of vital statistics for the State as a whole. Now the Director of the Bureau of Economics and Statistics is the *ex-officio* Registrar-General of Births and Deaths for the State.

The average birth-rate was 35.5 per mille during the decade from 1941 to 1950, while the average rate for the Madras State was 31.7. The average death rate of 25.1 per mille in the district during that decade was high when compared to the average rate of 21.2 for the Madras State. Later, the annual death rates have shown a steady decline except in 1947. The district experienced a very severe epidemic of plague in 1941 and 1943 and reported cases of plague in some of the later years also. There was also an outbreak of cholera in 1942-43 which took a heavy toll of human lives in the district. The death rates from other principal diseases were about normal.

The following table gives the variations in the total population of the district for the seven decades of the century :—

<i>Census Year</i>	<i>Total population</i>	<i>Variation</i>	<i>Percentage decade variation</i>
1901	6,08,123	..	..
1911	6,05,034	-3,089	-0.51
1921	5,23,628	-81,406	-13.45
1931	5,93,770	+70,142	+13.40
1941	6,49,028	+55,258	+9.31
1951	7,73,712	+1,24,684	+19.21
1961	9,15,261	+1,41,549	+18.29
1971	11,22,686	+2,07,425	+22.64

Births and deaths

From the above figures, it is seen that in the decade 1961-1971, the net increase in population was 2,07,425, the highest during the 70-year period.

The subjoined table indicates the number of births and deaths* for the period from 1959 to 1968 :-

<i>Year</i>	<i>No. of births</i>	<i>No. of deaths</i>
1959	21,236	10,801
1960	18,131	7,062
1961	20,640	8,370
1962	22,413	9,403
1963	19,489	7,875
1964	13,889	6,881
1965	12,052	5,504
1966	9,343	4,686
1967	9,603	4,427
1968	10,915	3,460

From the foregoing table, it can be seen that in recent years, the death-rate has been generally falling; so also the birth-rate. The fall in the death rate is, to a large extent, due to the intensive preventive and curative measures taken and a better standard of living. There has been a systematic drive to control epidemics and a large number of people have been vaccinated or inoculated. The fall in the birth-rate may be attributed, to a certain extent, to the intensive family planning drive that is being carried out in the recent years and the growing consciousness among the people, especially among the educated classes, to limit their families.

*The birth and death rates, as recorded in the district, fall much short of the known rates for India. This evidently shows that there are certain omissions in recording the vital events.

Infant mortality was considerably high in the previous decades of this century. This has, however, been considerably reduced in recent years with the introduction of modern system of midwifery and the rapid implementation of maternity and child welfare services under the plan programmes. The subjoined table gives the number of still births and infant deaths in the district for the period from 1959 to 1968 :—

Year	No. of still births reported	No. of infant deaths reported
1959	268	2,098
1960	187	1,148
1961	22	1,373
1962	153	1,372
1963	214	1,018
1964	69	867
1965	38	825
1966	27	571
1967	39	539
1968	47	419

The main causes for maternal deaths are anaemia, haemorrhage, eclamsia and difficult labour. As in the case of infant mortality, the rate of maternal mortality, which was high in the earlier decades, has been greatly reduced in recent years. This is mainly due to the increased facilities provided for the pre-natal, natal and post-natal treatment in the several hospitals, maternity homes and health centres in the district. The number of maternal deaths reported for the period from 1959 to 1968 are given below :—

Year	No. of mater- nal deaths reported.
1959	125
1960	59
1961	69
1962	92
1963	129
1964	39
1965	40
1966	18
1967	N.A.
1968	19

(N.A.=Not available)

Source: Bureau of Economics and Statistics.

Common diseases

There are insanitary environmental conditions and unprotected water supply, especially in the rural areas. Under-nutrition and mal-nutrition also affect the poorer sections of the people, as the district has been often subject to scarcity conditions owing to failure of monsoons. The common diseases for which the majority of patients were treated in the district are respiratory diseases, fevers, dysentery, cold, venereal diseases, diarrhoea, bronchitis, helminthiasis, etc. The other diseases from which the people generally suffer are tuberculosis, typhoid, pneumonia, digestive diseases, anaemia, worms, ulcers, skin diseases and the like.

Epidemics

One of the most important functions of the Department of Health Services has been the control of communicable diseases in the district. Small-pox and cholera are the two diseases, which at times, assume epidemic proportions in the district. But small-pox and cholera may be said to be still persisting with sporadic outbreaks in some or the other parts of the district. When an epidemic breaks out, the Health Inspectors and other health workers are alerted to work in close co-operation under the general guidance 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 drinking water sources in the area are thoroughly disinfected and the villagers are advised to isolate the sick persons 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 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 are requisitioned to control any out-break of epidemics.

Plague

Plague was often prevalent in the district upto 1950. The district has been almost free from it since then. Under the plague control establishment, two posts of Health Inspectors were sanctioned on temporary basis, renewable each year, and one Health Inspector was posted to each of the taluks of Kudligi and Harapanahalli. Later, the services of these Health Inspectors were utilised for observational purposes in the plague-endemic villages and their services were also made use of for other aspects of health work like vaccination.

Small-pox

Small-pox has been a major health problem all along in the district. The number of attacks and deaths during 1960-61 were 371 and 72 respectively whilst during 1959-60, the numbers were 342 and 72 respectively. During the year 1958-59, there were

319 attacks and 90 deaths from small-pox. During 1960-61, infection was reported from 54 villages in the district, as against 52 villages in 1959-60 and 29 villages in 1958-59. Frequent visits were made by the health staff to the infected villages and immediate action was taken to bring the infection under control. The incidence was on the increase from 1960 to 1964. During this period, large-scale efforts were made through primary vaccination and subsequent planned periodical vaccination to bring the disease under control. As a result, the incidence of small-pox has been greatly reduced in recent years and no cases were reported during 1969 and 1970, as shown below :—

<i>Year</i>	<i>Attacks</i>	<i>Deaths</i>
1966	306	56
1967	172	40
1968	78	28
1969	Nil	Nil
1970	Nil	Nil

Small-pox affects particularly children. Vaccination being the only preventive, it is done on a phased scale by the health services staff. This work is attended to by the trained basic health workers, auxiliary nurses and midwives 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 entire town or village is conducted for detection of un-protected cases. When small-pox breaks out in an epidemic form, the health workers have to rush to the infected area and vaccinate all un-protected children and adults. Re-vaccination is necessary for protection against small-pox, and hence due attention is paid to re-vaccination work also. The following table shows the number of primary and re-vaccinations done during the years from 1966 to 1970 :—

<i>Year</i>	<i>No. of primary vaccinations*</i>	<i>No. of re-vaccinations*</i>	<i>Total</i>
1966	46,015	2,58,258	3,07,675
1967	40,816	2,42,372	2,85,238
1968	45,724	2,24,823	3,39,667
1969	59,915	2,07,818	2,65,733
1970	51,931	1,54,381	2,06,312

*Under the National Small-pox Eradication Programme, the monthly target is 10,000 primary vaccinations and 25,000 re-vaccinations.

Cholera

The district was free from cholera during the years 1959 and 1960. However, 17,545 anti-cholera inoculations were done during the major festivals in Kudligi, Hadagalli and Hospet ranges and minor festivals in Bellary range during 1960-61. One hundred and forty-nine houses were disinfected and sanitary arrangements were made in connection with twenty-four *jatras* conducted in the district during 1960-61. The incidence was high during 1962 and 1964. Subsequently, the infection was brought under control by resorting to mass inoculations, by blocking all contaminated sources of water and by treating with chemicals all such water-sources to destroy the infectious germs. The figures given below indicate the number of cholera deaths in the district during the years from 1966 to 1968 :—

<i>Year</i>	<i>Deaths</i>
1966	9
1967	N.A.
1968	16

Guinea worm

Guinea worm prevails in some places, more so in the western taluks, but precise information regarding it is not available, as those attacked by it usually treat themselves instead of going to the hospitals and dispensaries. Sporadic cases were reported from the endemic villages of Bellary, Hospet and Sandur ranges. This disease is due to contaminated water and action has been taken and is being taken to convert the step wells into draw wells as a preventive measure.

Ophthalmia

Ophthalmia is common in the district owing probably to the glare occasioned by the dryness of the area, its treelessness and the frequency throughout it of bare rocks and roads metalled with white granite.

Malaria

Malaria control work has been in progress in Bellary district since 1956 when a National Malaria Eradication Unit was started at Bellary. This unit covers the entire area of Bellary district except Bellary city and seven taluks of Chitradurga district. Bellary city is covered by the Bellary Hypo-Endemic Sub-Unit which is under the control of the Mysore Hypo-Endemic National Malaria Unit at Mysore since 1959. Since the National Malaria Unit of Bellary has to cover a huge population, it is contemplated to re-organise this unit by merging the Hypo-Endemic Sub-Unit of Bellary city with it. Both the National Malaria Eradication Unit and the Hypo-Endemic Sub-Unit have full complement of the staff which are engaged in eradicating malaria in their respective areas. There are two sub-units, one at Hospet and another at Kudligi, under the control of the National Malaria Eradication Unit.

The endemic areas of Bellary district have been covered, so far, by 14 rounds of spraying. Bellary city has been covered by three rounds of spraying. Since April 1960, 48 rounds of fortnightly domiciliary visits to all the houses in the National Malaria Eradication Unit area of Bellary have been made by the surveillance workers. The figures relating to positive cases encountered, blood smears collected and examined and positive cases detected are given below :—

	<i>Active</i>	<i>Passive</i>
Total number of fever cases ..	92,421	9,376
Total number of blood smears collected ..	88,573	9,76
Total number of blood smears examined ..	88,573	9,376
Total number of positive cases ..	450	26

Due to infection reported from the labour camps in the canal area under the Hospet Sub-Unit and manganese mining areas of Sandur, it is proposed to continue spraying in the entire Hospet Sub-Unit area and Sandur taluk of Kudligi Sub-Unit. In the rest of the area, surveillance work is continued. In Bellary city, anti-mosquito measures by oiling are adopted. Since April 1960, 48 rounds of active malaria surveillance have been done and D.D.T. spraying has been suspended in Bellary city.

The disease of leprosy has been one of the oldest diseases of mankind, presenting a major public health problem for centuries in India. It was extremely dreaded and leprosy patients were socially almost segregated. The scientific and technical advancement in the medical field has proved that leprosy is not hereditary or congenital; it is not transmitted through food and all leprosy cases are not infective. Leprosy is prevalent in the Bellary district, mostly in the taluks of Harapanahalli, Kudligi and Hadagalli. The Leprosy Control Unit sanctioned earlier in 1958 with an Assistant Medical Officer of Health and three Junior Health Inspectors was upgraded into a Government of India-type of Control Unit, as a subsidiary centre of the National Leprosy Control Scheme. The unit, which was started earlier, after completing a preliminary survey of 240 main villages and a number of hamlets in the three taluks of Harapanahalli, Kudligi and Hadagalli (comprising a population of 3,03,125), undertook treatment and follow-up of cases, examination and surveillance, educative propaganda by means of health talks to individuals and also to groups in the family and elsewhere. They also conducted clinics at specified places. **Leprosy**

By 1960-61, the full staff for the upgraded unit of the National Leprosy Control Scheme had not been posted and hence, the previous programme was continued for some time. Treatment of cases was arranged at weekly clinics, where the Assistant

Medical Officer of Health examined the cases. In addition, treatment was also given by the rural medical practitioners and range health inspectors in several of the places. In all such places and elsewhere, arrangements were made to provide treatment with Avlosulphone tablets. The Leprosy Control Unit at Harapanahalli caters to a population of three lakhs in Harapanahalli and Hadagalli taluks. The staff consists of one Medical Officer and 15 leprosy para-medical workers, who are engaged in survey, education and treatment in the area concerned. As per the initial survey conducted in the project area, there were 2,485 leprosy patients as at the end of November 1971. Besides the Control Unit at Harapanahalli, there are five Leprosy Survey, Education and Treatment Centres attached to Primary Health Centres at Mariyammanahalli, Gudekota, Choranur, Sidiginamola and Kurugodu. Each centre caters to a population of about 25,000.

An important item of the activities of the Department of Health Services is to make sanitary arrangements during fairs and festivals, when people gather in large numbers. The funds for this purpose are provided by the local bodies, viz., the respective Panchayat or Taluk Development Board and in a few cases, by the temple authorities.

**Primary
Health
Centres**

There are 12 Primary Health Centres of Government of India-pattern established in the rural parts of the district during the successive Five-Year Plan periods, with a view to extending medical aid to more and more people. Each such centre covers a population of sixty thousand and the bed-strength, on an average, is six. These health centres which provide instant remedial measures to needy patients are gaining popularity in the rural areas.

The staff sanctioned to each of these primary health centres consists of one Medical Officer of Health, a Health Visitor, a Junior Health Inspector, a Pharmacist and two class IV workers. Besides, for the family planning aspect of the work, there are also an Extension Educator, a Computer and a Health Assistant for every 20 to 30 thousand population and an Auxiliary-Nurse-Midwife for every ten thousand population, under the Medical Officer of Health. Similarly, for looking after the malaria maintenance work, there are a Senior Health Inspector, a Junior Health Inspector and a Basic Health Worker for every ten thousand population.

**Primary Health
Units**

There are at present (1972) only five Primary Health Units (Mysore-type) in Bellary district. Each of these units generally covers a population of 10 to 15 thousand. The main basic health services that are being rendered to the rural people through these units are : (1) curative services, (2) control of communicable

diseases such as small-pox, malaria and filaria, cholera, plague, leprosy, tuberculosis, etc., (3) family planning, maternity and child health services, (4) health education, (5) school health services, (6) collection of vital statistics and (7) environmental sanitation. The staff attached to each of the Mysore-type health units consists of an Assistant Medical Officer of Health, a Junior Health Inspector, a Pharmacist, three Midwives and three members of class IV staff.

All the medical institutions at the taluk-level and below are under the control of the District Health and Family Planning Officer. In 1970, there were, in all, 36 allopathic medical institutions, including the primary health centres and units referred to already, in the district, under the charge of the District Health and Family Planning Officer. Of these 36 institutions, five were combined dispensaries, two Government hospitals, one local fund dispensary, three reduced-scale local fund dispensaries, one maternity home, one leprosy centre and six health unit-type dispensaries. The Government Hospital at Hospet is equipped with an X-ray unit. The local fund dispensaries and the health unit-type dispensaries are maintained by the Taluk Development Boards.

The District Headquarters Hospital and the Medical College Hospital at Bellary are under the control of the Dean of the Government Medical College, Bellary. There are eleven municipal dispensaries, six at Bellary and five at Hospet, maintained by the respective municipalities. The other allopathic dispensaries in the district are the Women's and Children's Hospital, T.B. Sanatorium, S.C. Railway Dispensary, Central Jail Dispensary, M.S.R.T.C. Dispensary, Iron-ore Mobile Unit Dispensary, Reserve Line Dispensary, Borstal School Hospital, Junior Certified School Hospital, St. Mary's Hospital and Goodwill Mission T.B. Sanatorium—all at Bellary and E.S.I. Dispensary, T.B. Dam Hospital and Kampli Sugar Factory Dispensary in Hospet taluk. As in 1970, there were five private nursing homes in Bellary city. A brief account of the important hospitals is given elsewhere in this chapter. Besides, a statement showing the location of and the number of patients treated in each of the other important institutions is appended at the end of the chapter.

There were 22 Ayurvedic medical institutions in Bellary district as on 31st December 1960. These institutions had rural medical practitioners who were paid a monthly subsidy of Rs. 65. Midwives were also attached to some of these dispensaries. By the year 1970, the number of these medical institutions had increased to 72, of which 60 were under the control of the Taluk Development Boards. Now (1972), each of these institutions is being paid a subsidy of Rs. 200 per month, besides a sum of Rs. 5 for monthly contingent expenditure and an annual medicinal

**Allopathic
Dispensaries**

**Ayurvedic
Medical
Institutions**

charges of Rs. 1,000. The technical control is vested with the District Health and Family Planning Officer. As per the figures furnished by the Taluk Development Boards, on an average, 2,500 to 3,500 patients are being treated every year in each of these rural medical institutions, the average annual expenditure incurred being Rs. 3,460 on each.

Of all the Ayurvedic dispensaries, the Taranath Ayurvedic Dispensary in Bellary city has been the most well-known institution for the last two decades. The Taranath Ayurveda Vidya Peetha at Bellary has been mainly responsible for training a number of persons in Indian medicine (*see* also Chapter XV).

Family Planning

The Family Planning Programme has assumed considerable importance in recent years, because of the alarming increase in the growth of population and the consequent need for checking it. A State Family Planning Board has been functioning since the year 1957. There is a District Family Planning Committee at Bellary, 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 education of the public about the needs and methods of family planning.

As a first step in this direction, two rural family planning centres were started at Siruguppa and Chorapur in 1961. Midwives of the Primary Health Units were given training at Siruguppa. Gradually, the family planning advice and services were extended to other dispensaries in the district. Now (1972), family planning services are made available at all the Primary Health Centres in the district, at the Medical College Hospital, District Headquarters Hospital, Women's and Children's Hospital, T.B. Sanatorium, Municipal Dispensaries in Bellary city, at the Government Hospital and Municipal Dispensaries at Hospet and at the T.B. Dam Hospital near Hospet. Private practitioners also attend to the family planning services.

Vasectomy and Tubectomy

Facilities have been provided in all bigger medical institutions in the district for conducting vasectomy and tubectomy operations. Such operations are also being conducted in Red Cross Camps at Bellary and Hospet. In order to popularise these surgical methods of family planning, the services of private medical practitioners are also utilised wherever possible. The authorised private practitioners, who render family planning services at their own clinics or the nursing homes without any assistance from the Government, can claim Rs. 30 per case of vasectomy, Rs. 40 per case of tubectomy and Rs. 11 per case of I.U.C.D., provided they render services free of cost to the patients, give free pre- and post-operative follow-up treatment and attend to any complication noticed later on. Medical advice on the methods of family

planning is given to married persons, who require such advice, and also to those who, in the opinion of the medical officer, cannot undergo the strain of pregnancy and parturition without danger to their health. The Primary Health Centres in the district also conduct couple surveys and selected couples are advised through individual contacts to adopt temporary or permanent family planning methods. A device of family planning for women, popularly known as the loop (intra-uterine contraceptive device), was introduced in the district during the year 1965-66.

Contraceptives such as jellies, diaphragms and *nirodhs*, etc., were 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, family planning fortnights are organised every year throughout the district, when as many people as possible are covered under the programme. Orientation training camps are also conducted at certain selected centres for providing training to village leaders.

During the latter part of the Third Five-Year Plan and the subsequent annual plans, the activities of family planning were accelerated. The following table gives the number of vasectomy and tubectomy operations conducted, the target set and progress achieved during the years from 1965-66 to 1969-70 :—

Year	Target	Achievement	Percentage of progress
1965-66 ..	Not fixed	1,886	..
1966-67 ..	3,200	1,884	59.0
1967-68 ..	3,655	6,454	176.6*
1968-69 ..	6,500	4,980	75.6
1969-70 ..	5,700	1,878	36.2

Progress in I.U.C.D.

1965-66 ..	Not fixed	886	..
1966-67 ..	8,000	3,711	24.9
1967-68 ..	7,310	1,412	20.9
1968-69 ..	4,330	1,079	25.0
1969-70 ..	13,145	824	61.4*

(*Bellary district stood second in the State during these years).

Domiciliary midwifery is attended to by the auxiliary nurse-midwives and midwives attached to the Primary Health Centres and Units and local fund dispensaries, while institutional midwifery

**Maternity and
Child Health
Services**

is also attended to in all these hospitals in Bellary district. There is an auxiliary nurse-midwife for every 5,000 population. She pays weekly visits to the villages concerned and renders natal, post-natal and infant services. She attends to the work of vaccination and re-vaccination as and when required.

**Nutrition
Programme**

An Applied Nutrition Programme has been in operation since 1968-69 in the Kudligi Community Development Block. The Primary Health Centres at Gudekota and Kottur have carried out diet and clinical nutrition surveys in the Block. The results have revealed, in general, a higher intake of cereal, a little quantity of pulse and very negligible amount of other food-stuffs in the diet as compared to the recommended allowance in a balanced diet. Under the Applied Nutrition Programme, the people in the Block are being encouraged to increase the production of protective foodstuffs and consume them locally. The Community Development Block of Mallapuram was selected for this programme during the year 1971-72.

Under the auspices of the Education Department, the mid-day meal scheme is in operation in the district. There are 355 centres feeding about 22,764 school children and 13,435 pre-school children (1971). A composite programme for mothers and children was initiated in the district during 1971-72. The main components of this programme are nutrition education and demonstration feeding of pregnant and nursing mothers and children of the age ranging from six months to five years. Under another programme called prophylaxis programme against nutritional anaemia, about 5,220 pregnant and nursing mothers and 5,220 pre-school children would be supplied with combined tablets of folic and ferrous sulphate as part of the prophylactic treatment. In order to educate the people on nutrition problems, films on nutrition topics have been supplied to the District Health and Family Planning Officer for using them for mass education programme in the district. The Primary Health Centres in the blocks, where Applied Nutrition Programme is being carried out, are supplied with film strips. Posters, folders, flash-cards are also being used for publicity and nutrition education activities in the district.

**Health
Education**

Health education forms one of the important activities of the Health Services Department. The basic health workers, who primarily attend to this aspect of the work, are required to utilise every opportunity, especially during village gatherings, to contact the rural populace and to talk to them about various health subjects, sometimes giving practical demonstrations, in regard to the personal cleanliness, environmental sanitation, chlorination of water, vaccination, D.D.T. spraying, etc. The Department also arranges for the observance of the World Health Day, Leprosy Day, Anti-Fly Week, Family Planning Fortnight and the like in the district, so as to impart health education to the people. On

such occasions also, the health services authorities make arrangements to give talks, organise exhibitions and screen films on various subjects in the villages and towns.

The aim of the School Health Programme is to provide comprehensive health care to the school children comprising medical examination, treatment, correctional remedies and follow-up action, school sanitation, proper water supply and provision of playgrounds, health education in school, etc. During the year 1965-66 only one Primary Health Centre at Kottur was attending to school health service in the district. The service was extended to two more Primary Health Centres at Ittigi and Kurugodu during the year 1968-69. The number of schools selected and the number of children covered by each of the three Primary Health Centres during 1970-71 were as follows:—

School Health Services

<i>Name of Centre</i>	<i>No. of schools selected</i>	<i>No. of children covered</i>
Kottur ..	8	2,398
Ittigi ..	9	1,578
Kurugodu ..	9	1,629
Total ..	26	5,605

According to the 1961 Census, there were 312 persons working as physicians, surgeons and dentists in the Bellary district. Of the 312 persons, 294 were men and rest were women; of them 223 men and 15 women were working in towns. Then there were 663 persons working as nurses, pharmacists and other medical and health technicians, of whom 465 were men and 198 were women. Of these persons, 201 men and 137 women were working in the urban areas, while 264 men and 61 women were serving in the rural areas. During the year 1967, there were 13 Ayurvedic and 12 registered medical practitioners in the district, while during the subsequent year, *i.e.*, 1968, the number of these practitioners were: Ayurvedic 34 and Integrated 36. There were only four Unani registered medical practitioners in 1968.

Medical personnel

The Sabhapathy Mudaliar District Headquarters Hospital, Bellary, was first opened on 1st May 1842 and was originally supported largely by voluntary subscriptions. In 1871, it was transferred to the care of the Bellary Municipal Council. In the year 1885, it was moved to its present home, an excellent building presented to the municipality by the late A. Sabhapathy Mudaliar. A set of new buildings consisting of (1) operation theatre, (2) surgical wards, (3) out-patient block, (4) administrative block and (5) post-mortem room, etc., were added during the subsequent years. The District Headquarters Hospital is one of

District Headquarters Hospital

the most well-equipped and biggest in the State, next only to the Bangalore and Mysore hospitals. It caters to the needs of a large number of patients even from the neighbouring Andhra Pradesh. The bed-strength of the hospital was 152 in 1960. The establishment of the hospital consisted of one District Surgeon, two Honorary Medical Officers, one Honorary Assistant Medical Officer, 14 Assistant Surgeons, 22 nurses and 58 other workers as in 1960. The daily average number of in-patients treated as on 1st January 1960 was 263.9 and the daily average number of out-patients treated was 344.9. The hospital consists of almost all the specialist sections like E.N.T., ophthalmic, dental and X-ray, anti-rabic and family planning clinic. All kinds of major operations are being done and arrangements have also been made for providing treatment under deep X-ray therapy. The Government sanctioned the construction of additional wards to accommodate 100 more beds at a cost of Rs. 3,05,000 and an upto-date operation theatre at a cost of Rs. 2,14,000, but the execution of these works was deferred in view of the sanction for establishment of a Medical College at this place and construction of a new larger hospital attached to it. By 1971, the bed-strength of the hospital was 175. The hospital was provided with three obstetric and gynaec units, one paediatric unit and dental and T.B. clinics. Because of the still larger Medical College Hospital which has come up at this place, the pressure on this District Headquarters Hospital is lessened. The daily average number of out-patients treated in 1970 at the District Headquarters Hospital was 265.19 as against 143.86 in 1966, and the daily average number of in-patients treated in 1970 was 183.75 as against 275.114 in 1966. The number of major operations conducted in 1970 was 792, while the number of minor operations performed was 960. In all, 1,247 labour cases were attended to in the hospital in that year.

As in 1971, the staff consisted of one District Surgeon, eleven Assistant Surgeons of Grade I, nine Assistant Surgeons of Grade II, three Honorary Medical Officers, one Dental Assistant Surgeon, one Lady Medical Officer of Health, two Nursing Superintendents of Grade I, two Nursing Superintendents of Grade II, 39 nurses, four midwives, besides technicians and ministerial staff and class IV officials. There is a Static Sterilisation Unit attached to the Family Planning Centre of this hospital where specially trained doctors are in charge of training. The total expenditure incurred on this hospital during the year 1969-70 was Rs. 8,46,000.

**Medical College
Hospital,
Bellary**

The Medical College Hospital was started on 12th August 1966. It is located in the former Alipur Jail premises. Several blocks of the Jail have been altered to accommodate various departments of the hospital. The out-patient department is working in a U-type new building exclusively meant for the treatment of out-patients. The State Government have accorded

sanction for a bed-strength of 680 for this hospital and construction of necessary buildings close to the present out-patient department. Work in this connection is in progress. As in January 1971, the bed-strength of the hospital was as follows:—

1.	General Medicine	..	..	127 beds
2.	Surgery	..	..	120 beds
3.	Dermatology	..	..	12 beds
4.	Ophthalmic	..	..	25 beds
5.	E.N.T.	..	..	20 beds
6.	Orthopaedic	..	..	31 beds
Total				335 beds

The daily average number of out-patients treated during 1970 was 477.40 as against 445.1 in 1967, while the daily average number of in-patients treated was 343.42 in 1970 as against 342.4 in 1967. The common diseases for which a majority of patients were treated were tuberculosis, dysentery, cold, typhoid, fever, anaemia, cirrhosis of liver, venereal diseases, duodenal ulcer, pneumonia, etc. The number of major operations performed during 1970 was about 1,350, while minor operations numbered about 8,000. During that year, in the X-Ray department, 5,854 screenings were done and 3,421 out-patient X-Rays and 1,954 in-patient X-Rays were taken. As many as 54,089 laboratory examinations were conducted in the hospital in 1970.

Facilities are provided in this hospital for training the auxiliary nurse-midwives, probationary nurses and laboratory technicians. As in 1970, there were 20 stipendiary and five non-stipendiary trainees undergoing training in nursing course of a duration of 3 years and 9 months; each of the former was paid an amount of Rs. 141 per month as stipend and allowances. There were also two batches of 80 trainees receiving training for becoming auxiliary nurse-midwives. This is a two-year course and each of these trainees was paid a stipend of Rs. 60 per month.

As in 1971, the staff of the Medical College Hospital consisted of seven Assistant Surgeons of Grade I, three Assistant Surgeons of Grade II, one Nursing Superintendent of Grade I, six Nursing Superintendents of Grade II and 32 nurses, besides technicians and ministerial staff and class IV officials. There is a Nurses' Home for the staff nurses in the premises. A limited number of residential quarters are allotted to doctors and other members of the staff. The total expenditure incurred on the Medical College Hospital during 1969-70 was Rs. 5,44,000.

**Women's and
Children's
Hospital**

A hospital for women and children called the Victoria Memorial Hospital was functioning in an old building since 1904 under the control of the Bellary Municipality and it was taken over by Government in 1917. The building was located on a cramped triangular site in a very busy locality bounded on all sides by roads with no scope for extension.

In the year 1956, late Shri A. R. Kuppuswamy Mudaliar came forward with a donation of Rs. 50,000 for the construction of a new hospital for women and children on the site adjacent to the Headquarters Hospital. A further sum of Rs. 50,000 was contributed by the Bellary Municipality for the construction of the building. The construction of a new building was sanctioned by Government at an estimated cost of Rs. 3,70,000, which was to be taken up in two stages. The first stage of construction costing Rs. 2,00,000 was completed with an accommodation for 44 in-patients. The women and children's hospital was shifted to the new building with effect from 15th December 1960 and the old building was allotted to the Auxiliary Nurse-Midwives Training Centre. The staff of this hospital in 1961 consisted of two lady doctors, four nurses, three midwives and eleven others. The daily average number of in-patients treated during 1961 was 47 and the daily average number of out-patients was 150. The hospital was a training centre for pupil midwives and there were ten pupils undergoing training in the hospital in 1961.

**Government
Wellesley T.B.
Sanatorium**

The main block of the present Government Wellesley T. B. Sanatorium was originally a Military Hospital which became vacant when the army left Bellary. It was converted into a Jail Sanatorium with construction of some additional compartments. The Jail Sanatorium was opened on 23rd November 1929. The Board of Visitors of the Central Jail represented to the Government that a part of the Jail Sanatorium could be made available for accommodating civilian tuberculosis cases since there was a great need for the same. Though this Jail Sanatorium could accommodate 175 prisoner patients, the number of such patients never exceeded 82. The Madras Government, therefore, in consultation with the Surgeon-General and the Inspector-General of Prisons ordered its transfer to the Medical Department for running it as a civil sanatorium, at the same time providing accommodation to the prisoners suffering from tuberculosis. The institution came under the management of the Medical Department with effect from 1st October 1947 and the bed-strength was also increased from 175 to 200. The committee for the administration of the post-war services reconstruction fund constructed a twin-ward with 36 beds for the use of ex-service men. This ward was given over to the institution on 7th July 1957. The bed-strength was later increased from 236 to 240 in 1961 and from 240 to 288 with effect from 28th June 1965. T. B. Patients not only from all parts of the Mysore State but also from the neighbouring parts of Andhra

Pradesh are being treated in this hospital. In 1961, the daily average number of in-patients treated was 230 and the corresponding figure of out-patients was 47. The total number of in-patients and out-patients treated in 1970-71 was 1,884 and 10,561 respectively. As in July 1971, the medical staff consisted of one Surgeon, three Assistant Surgeons of Grade I, one Grade I and one Grade II Nursing Superintendents, 24 nurses, 20 nursing orderlies besides technicians, clerical staff and class IV officials. The total expenditure incurred on this hospital during 1970-71 was Rs. 7,60,475.

The Government Hospital at Hospet has a bed-strength of 30. The daily average number of in-patients and out-patients treated was 36 and 245 respectively in 1961. During 1970-71, 10,156 in-patients and 1,00,846 out-patients were treated in the hospital. The total expenditure incurred on the institution during the year was Rs. 78,799. The institution is under the charge of an Assistant Surgeon (Grade I) who is responsible to the District Health and Family Planning Officer, Bellary. It has three other Assistant Surgeons (including one lady doctor), one Dental Assistant Surgeon, three nurses, two midwives, two pharmacists, one X-ray technician and 11 others. It is equipped with an X-ray plant, and facilities exist for attending to major operations in the hospital. A family planning clinic is also attached to the hospital.

**Government
Hospital,
Hospet**

Statement showing the location of Health Centres and important dispensaries in Bellary district (taluk-wise) and the number of patients treated and expenditure incurred during 1969-70 :—

<i>Sl. No.</i>	<i>Name of Dispensary with location</i>	<i>No. of in-patients treated.</i>	<i>No. of out-patients treated.</i>	<i>Total expenditure incurred</i>
1	2	3	4	5
BELLARY TALUK				Rs.
1.	Primary Health Centre, Kurugodu	16	17,429	77,337
2.	Primary Health Centre, Sidigina-mola.	58	14,315	81,651
3.	Health Unit-type Dispensary, Kudathini.	..	10,800	..
4.	South-Central Railway Dispensary, Bellary.	..	22,174	..
5.	Central Jail Hospital, Bellary. ..	7.5 (daily average)	35 (daily average)	18,321
6.	M.S.R.T.C. Dispensary, Bellary. ..	..	6,060	6,060
HADAGALLI TALUK				
1.	Primary Health Centre, Holalu ..	..	12,526	63,318
2.	Primary Health Centre, Ittigi. ..	..	8,474	63,261
3.	Health Unit-type Dispensary, Hirehadagalli.	..	13,555	15,184
4.	Health Unit-type Dispensary, Sogi.	..	15,710	16,521
5.	Combined Dispensary, Hagari-Bommanahalli.	18	3,551	22,713
6.	Combined Dispensary, Huvinahadagalli	1,055	14,989	20,115
HARAPANAHALLI TALUK				
1.	Primary Health Centre, Arsikere.	..	12,693	85,400
2.	Primary Health Centre, Halavagal.	..	4,647	45,696
3.	Health Unit-type Dispensary, Chigateri.	..	..	..
4.	Health Unit-type Dispensary, Uchchhangidurga.	..	14,148	..
5.	R.S.L.F. Dispensary, Teligi. ..	..	6,561	10,868
6.	Leprosy Centre, Harapanahalli. ..	..	3,213	50,284
HOSPET TALUK				
1.	Primary Health Centre, Mariyammahalli.	..	11,559	80,717

1	2	3	4	5
2.	Health Unit-type Dispensary, Kamalapur.	..	16,673	20,905
3.	Combined Dispensary, Kampli. . .	..	11,000	13,740
4.	The India Sugars and Refineries Dispensary, Hospet.	..	57,304	11,107

KUDLIGI TALUK

1.	Primary Health Centre, Gudekota.	13	5,662	67,815
2.	Primary Health Centre, Kottur. . .	..	..	..
3.	Local Fund Dispensary, Kudligi. . .	..	6,616	7,151
4.	R.S.L.F. Dispensary, Ujjini. . .	..	8,285	11,751
5.	R.S.L.F. Dispensary, Alur. . .	..	4,817	12,547
6.	Combined Dispensary, Chikkajogihalli.	..	7,987	33,344

MALLAPURAM TALUK

1.	Primary Health Centre, Hampasagar.	22	12,885	58,892
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SANDUR TALUK

1.	Primary Health Centre, Chorapur. . .	83	26,804	80,648
2.	Government Hospital, Sandur. . .	72	4,033	26,072

SIRUGUPPA TALUK

1.	Primary Health Centre, Siruguppa.	27	26,599	1,29,742
2.	Primary Health Unit, Kuruvalli. . .	..	5,670	19,386
3.	Primary Health Unit, Ravihal. . .	..	5,097	23,205
4.	Primary Health Unit, Tekkalakota.	..	12,881	36,622
5.	Primary Health Unit, Sirigere.	..	..	..
6.	Primary Health Unit, Karur. . .	..	7,120	33,948
7.	Maternity Home, Siruguppa. . .	..	..	..

(R.S.L.F.—Reduced Scale Local Fund).