CHAPTER 15

MEDICAL AND PUBLIC HEALTH SERVICES

The details are available about the remedy for the diseases (including communicable diseases) by utilizing the medicinal herbs and shrubs, which were protected and nurtured locally due to Ayurvedic system of medicine, under the ancient traditional Indian System of Medicine. 'Ayurveda' was considered as one of the important parts of Vedas. This indigenous medical system was popular and trustworthy among the local people and this system was in vogue since ancient times. This traditional medical system, which was developed on the basis of Indian environment, has been referred in religious treatises. It can be said that the origin of Ayurvedic System is due to worshipping of God "Dhanvanthri". The details of protecting and nurturing of medicinal plants are found mentioned in various inscriptions. It is seen from the inscriptions found at Gudnapura and Banavasi that the Kadamba rulers were worshipping "Kadamba Tree" as the sacred tree of their dynasty. The details of construction of temples and cultivation of Dhanvanthri forest and gardening of flowering plants for continuous worshipping of Gods. Besides, also for endowment purposes, growing of Dhanvantri forest and gardening of forest plants is seen apart from cultivation of special herbs and shrubs for the worshipping of God.

Several details about the resources of plants of Indian origin are seen in various records of the district. Because of this, the Indian medical system cannot be ignored, even though the modern medical system has grown due to the influence of foreigners. The Ayurveda, and local medical system has become trustworthy with the community for getting rid of various diseases and ailments, as there is no remedy available for them under the modern method of medical system recently.

Generally the health care is the personal responsibility of the individual and it has become his fundamental responsibility. Due to climatic changes, seasonal variations and weather conditions, lack of environmental sanitation, drought, floods, and other natural calamities like cyclone, which create ill effects on the health of the people and thereby leading to different diseases. It is possible to protect the health of the people, if there is a systematic medical and health services. People were depending upon household medicines and traditional healers, which were in vogue, prior to the British rule in our country.

Depending on Environment, Natural resources, Medicinal plants and Customs and Traditions of the people of the area, the indigenous medical system came into existence. The practicing Ayurvedic Pandits who knew about the quality of medicinal plants were found in each village. These experienced pandits used to give good and quality medicine to all the diseases. The persons who had good knowledge about medicinal plants had formal education in Ayurveda and few of them had even the patronage of Kings. The doctors who used to treat the kings and their family members, were called as 'Raja Vaidyas'. This indigenous system of Ayurveda has still retained popularity and tradition and a few doctors are practicing this system. Government is also continuously encouraging this system.

When some regions, came under the role of Muslims in 14th Century, Unani system of medicine also came into being. There was patronage of rulers for many years for this system. These Unani doctors were called as 'Hakims' and people had faith, as they were treating and curing the disease: But this system was limited to cities/towns. This system has still maintained its tradition with limited growth and has received encouragement from the

Government. The combined data of Public Health & Medical facilities of British period in India is not available as there were no systematic Health & Medical services available during those days.

The systematic Medical and Public Health Service facility has a history of more than a century. In India inoculation against the small pox disease under allopathic system was started in 1800. Later the treatment was started. The medical department established in 1844 started identifying the diseases and giving universal vaccination against small pox was started.

The doctors allotted to Mysore province after 1831 were given the responsibility of giving Vaccine & Public Health Control Programmes. Later till 1870 the Mysore Medical department was limited to health care of soldiers, and in 1880 the Government took back the services of Assistant General Surgeon and his services were allotted to Senior Surgeon of Mysore Commission. The Head of Medical Department was appointed as Chief Sanitary Commissioner with additional responsibilities in 1913. District Civil Surgeons were appointed as District Sanitary Officers. Mobile Clinics were opened under the leadership of Assistant Surgeons in every district and were designated as District Sanitary Assistants.

The Government appointed the Public Health Deputy Director as Departmental Head, and a separate Deputy Director was posted for Medical Department. The administration of both these departments came under the control of a Director. By 1881, one Civil Hospital in Kolar and a Civil Dispensary were functioning. The Civil Hospital of Kolar was treating only the inpatients. In 1884 Kolar Civil Hospital was changed to District Hospital and a Civil Surgeon (Grade-II) was posted as the Chief of the hospital. Later the dispensaries were established in taluk centres. Allopathy centre was started in 1883 at Robertsonpet. A woman's hospital was opened in Chintmani. It was the first woman's hospital in the district. Another woman's dispensary was functioning in Kolar.

Prior to 1946, the District and Sanitary Officer looked after the administration, control and treatment of diseases in the district as well as the administration of the department. This responsibility was handed over to the District Health Officer in 1946. Much prominence was given to health services during five-year plans.

By addition of new schemes the areas of health services was expanded. By giving more responsibilities to District Health Officer, the post was re-designated as District Health and Family Welfare Officer. Much prominence was given to family Planning.

In 1965, the public health and medical departments were amalgamated and a new department called Director, Health Services, Mysore was created at the state level. Now a days, due to industrialization, urbanization, there is migration of people to urban areas. There is effect on the health of the people and because of these effects newer diseases are emerging. The diseases like, cancer, AIDS, heart ailments, respiratory problems, blindness and polio have made the life of people miserable. Due to continuous changes in medical and health services, the communicable diseases like plague, influenza and cholera are under control, if not completely eradicated. The diseases like leprosy, T.B., and malaria continue to be problematic. To reduce the death rate through newer inventions and to create healthy community, the health and family welfare department is implementing newer programmes.

After the reorganization of states the government is giving much prominence to rural health services and also has extended the area of health services. By including effective Health education and modern treatment facilities, the health services have been implemented. The activities like, importance to family welfare, extension of rural health services, modernization of district hospitals, increase of bed strength in the hospitals, control of communicable diseases like T.B, leprosy, cholera, malaria and opening of research wing in medical colleges have been incorporated in the eighth five year plan. Through the establishment of Primary Health Units, Primary Health Centres and Community Health Centres, the government has expressed its concern to provide health services to the rural community.

District Leprosy Officer, District Maternal and Child Health Officer, District Tuberculosis Officer, District Laboratory Officer, District Family Welfare Officer and Taluk Health Officers assist the District Health and Family Welfare Officer at the district level. The officers have the responsibilities of implementing the National and State Health programmes including Family Welfare and MCH services and provide the health services through the following programmes.

- 1. Rural Health Schemes to provide Minimum Needs.
- 2. Medical Development Programmes and Hospital Pharmacy Programmes.
- 3. National AIDS Control Programme.
- 4. Maternal and Child Health Programme.
- 5. Family Welfare Programme and Immunization Programme.
- 6. National Leprosy Control Programme.
- 7. National Tuberculosis Control Programme.
- 8. National Blindness Control Programme.
- 9. National Malaria Eradication Programme and National Diseases Control Programme.
- 10. National Guinea worm Eradication Programme.
- 11. Diarrhoeal diseases, Kyasanur Forest Disease, Japanese Encephalitis (Brain fever) Control Programmes.
- 12. Health Education and Training Programme.
- 13. Nutrition Programme (Education and Demonstration).
- 14. National Iodine Deficiency Disorders Control Programme.
- 15. Laboratory Services and Vaccine Manufacturing units.
- 16. Education and Environmental Sanitation Programme and Disease curative services.

During (2002-2003), 74 Primary Health Centres, 34 Primary Health Units, 6 General Hospitals, 4 Community Health Centres, 2 Urban Family Welfare Centres, and 10 Indian systems of clinics we are functioning in the District. Apart from them one Tuberculosis Hospital, one ESI Hospital, Two Leprosy Control Centres, 48 SET (Survey Education and Treatment) Centres, and Four Plague Control Units were functioning in the District. To provide Health Services to the doorsteps of the rural community 394 Sub Centres were working at Village level.

The facts and figures of the progress achieved under State and National Health Programmes during 2002-2003 in the district is as follows. 23,497 Sterilization Operations were done under Family Welfare Programme, 17284 IUD insertions were done 7,643 used oral pills and Nirodh users were 16,760.

During the same year (2002-03), 55481 children were given D P T, 55481 Oral Polio Vaccine, and 59,496 BCG Vaccine, 51,749 Measles Vaccine and TT Immunization to 59,493 Pregnant Mothers under Universal Immunization Programme.

Data on Births and Deaths

Prior to 1915 there was no scientific collection of Births and Death Statistics. Patels in Villages and Municipalities in towns used to register the Births and Deaths coming under their Jurisdiction. The data collected about Births and Deaths by Patels in Villages were sent to Tahsildars of the Taluk. After collecting the data, the Tahsildars used to send the same to Deputy Commissioners and they in turn consolidated the collected data and send it to Sanitary Commissioner. Later amendment was brought to the act for review of these collected statistics. In 1918 this registration system was regularized. The Birth and Death Registration Act 1969 came into force from 1st April 1970 in the State. The Birth and Death rules 1970 of Karnataka came into effect from 1st January 1971. As per the rules, all the events of births, deaths and marriages that occur in their families have to be registered with the Registrar. The Village Accountants in Rural areas and the City/Town Municipalities in Towns do this registration. The Deputy Commissioner is the Registrar of the District and the District Statistical officer will be the Additional Registrar of the respective districts.

When the data given in tables 15.1 and 15.2 is reviewed, it is seen that the Deaths due to respiratory disorders were more in recent years (1996). Deaths due to accidents are also increasing. The Deaths due to heart ailments and Heart attacks have increased by 10-15 times. The reasons for these may be air pollution, improper sanitation and increase in density of vehicles.

Model Registration System: Registrar General of India established a Model registration system in 1968, to provide yearly reports of Births and Deaths that occur in Villages & Towns to Government of India with 1961 as the base year. This system has been given much importance for providing Public Welfare and Health Programmes to the Community. The Birth rates and the Death rates are indicated as number of Births and Deaths respectively in a year for one thousand populations in a given or specified area. There are

different reasons for stillbirths, deaths of mothers during childbirth and they are Public health Problems. The district wise details are not available as they are calculated on zonal basis. Hence both birth and death rates are given both rural and urban wise as well as total figures. For the sake of model registration system the following rural and urban areas were selected.

Narasapura and Sajjalavaripalli of Bagepalli Taluk, Kadirenahalli of Bangarpete Taluk, Chikkadigarahalli of Chikkaballapur Taluk, Mallikarjunapura of Chintamani Taluk, Hegganahalli, Huchodanahalli and Vedalaveni of Gowribidanur Taluk, Veeravurthahalli of Gudibande Taluk, Byrandahalli of Kolar Taluk, Nuchuve of Malur Taluk, Reddihally of Mulabagilu Taluk and Y.Hunisenahalli of Shidlaghatta Taluk as rural areas and two census divisions of K G F belonging to Bangarapet Taluk as urban area were selected for this study. The details of Births and Deaths from 1987 to 1998 and the deaths due to several reasons from 1987 to 1998 are given in the Tables 15.1 and 15.2

Communicable Diseases

Natural calamities like drought, heavy rainfall, consumption of unhygienic food and polluted water are the reasons for spreading of communicable diseases. Cholera and Plague Diseases spread in the community at a faster rate and cause deaths. In order to prevent and control these diseases. Government has taken several precautionary measures on a large scale. Earlier Zilla Board Chairman and Municipal Presidents used to take responsibilities of controlling these diseases in their areas. Depending on the suggestions from Health Director, they used to take control measures. Now the District Health & Family Welfare Officer does this activity. A Communicable disease hospital is functioning in Kolar. About communicable diseases, AIDS, Brain fever that are found in Kolar District are explained below.

Plague: In 1898, Plague created havoc in the district, in the beginning. To Control this Disease, the Government spent sufficient funds. Even then till 1963, every year the Plague used to take toll of deaths in the District. The records show that during 1946 to 1948 and in 1954 and 1956 the Deaths due to Plague were high. As the Plague spreads due to rats, Government took several control

Table 15.1 : The Details of Births & Deaths Registration (1989 to 1998)

<u>.</u>							Years				
Š.	Particulars	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
-	2	3	4	5	9	7	∞	6	5	7	12
-	Births	26810	31449	31744	25921	26277	30225	33560	38614	36243	37891
7	Deaths	8655	8857	9096	5036	0202	9115	11241	11855	14355	14834
က	Still Births	248	202	102	141	127	199	225	192	202	124
4	Infant Deaths	193	219	197	77	151	106	160	115	181	228
ည	Maternal Deaths at the time of Delivery	28	15	20	7	21	72	13	9	29	59
ဖ	Birth rate (Rural)	29.1	29.0	27.9	27.4	26.7	26.0	25.1	24.2	23.9	23.1
	Birth rate (Urban)	25.1	25.0	24.0	23.3	23.1	22.7	22.1	20.3	20.1	19.4
	Total	78	28.0	26.9	26.3	25.5	25.0	24.1	23.0	22.7	22.0
_	Death rate (Rural)	9.6	8.8	9.8	9.4	9.5	9.3	8.5	9.8	8.5	8.9
	Death rate (Urban)	6.5	6.1	6.9	6.0	5.2	0.9	5.6	5.4	5.4	5.6
	Total	8.8	8.1	9.0	8.5	8.0	8.3	9.7	9.7	7.6	7.9
ω	Infant Mortality rate (Rural)	88	8	87	82	6/	73	69	အ	ಜ	8
	Infant mortality rate (Urban)	53	æ	47	41	42	20	43	25	24	25
	Total	80	02	77	73	29	29	62	53	53	28

The district wise details regarding rate of births, deaths and infant deaths is not available. Hence the Karnataka rates are given. Note

SI.No.1-5 = Births and Deaths ACT 1969, yearly reports (Directorate of Economics and Statistics) From SI.No.6-8=S.R.S. Statistics of Registrar General of India. Source

Table 15.2 Deaths due to different Reasons in Kolar District

S.						Years					
Š.	Reasons for Death	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
-	7	က	4	5	ဖ	7	8	6	9	=	12
-	Plague	,	,	ı	ı	•	•	1			'
7	Small Pox		ı	1		,	•	1		ı	
က	Cholera	က	22	∞	44	∞ .	15	æ	56	35	25
4	Malaria	3	က	4 -	21	4	20	•	12	38	38
ις.	Typoid	4	5	5	70	15	23	87		2	12
ဖ	Other Fevers	185	181	156	128	1198	1403	1240	710	1964	1561
~	Diarrhoea	38	36	74	288	111	120	594	691	814	728
œ	Respiratory Problems	17	12	4	22	44	106	579	773	888	692
တ	Tuberculosis	142	109	131	741	115	125	210	297	581	461
10	Leprosy	9	1	6	20	6	5	•	4	ည	1
11	Problems during delivery	56	15	20	7	21	22	13	91	29	29
12	Suicide	25	17	19	114	36	46	2	12	28	21
13	Drowning in Water	34	35	43	49	15	21	•	25	126	36
14	Injuries and Accidents	112	104	110	144	115	178	142	442	364	415
15	Wild Animals	-	1	-	16	-	3	-	12	•	1
16	Snake bites	67	26	38	11	34	43	32	32	37	12
17	Rabies	2	3	7	4	4	6	8		•	31
18	Tetanus	18	8	6	81	5	15	29	15	25	56
19	Diphtheria	12	13	5	3	-	4	•	15	52	26

ē						Sec. Sec.					
<u> </u>	Reasons for Death	000,		7007	0007	ובמו		2007	7007	1007	0007
<mark>ဗ</mark>		1989	1990	1991	1992	1993	1994	1895	1886	1997	1998
_	2	3	4	5	9	7	8	6	10	11	12
20	Pertusis	8	7	~	•	1	2	•	16	20	10
77	Polio	2	2	9	10	2	9	ŧ	8	7	1
22	Polio Myelits	-	3	3	1	1	9	1		•	. •
23	Pulmonary T.B.	18	13	10	15	13	15	I	ı	4	12
24	Poisonous Food	16	20	36	87	42	69	188	5	14	21
52	Measies	2	-	_		2	7	2	9	3	•
7 9	Cancer	98	81	120	346	879	870	262	187	399	456
27	Diabetes	15	14	6	114	25	30	63	36	22	82
82	Anaemia	38	23	10	32	6	21	13	36	108	61
53	Japanese Encephalitis	9	2	2	10	11	21	33	•	•	43
စ္က	Heart Problems	22	30	54	30	206	079	1384	813	302	1129
3	Heart Attack	122	105	328	236	287	424	257	1152	931	1766
32	Pneumonia	2	3	39	18	31	87	10	19	32	17
33	Influenza	1	£	14	1	7	13	2	1	5	17
34	Asthma	208	228	223	340	249	435	260	424	395	427
35	Jaundice	52	43	21	16	40	09	14	11	47	213
36	Other Reasons	3260	5379	3078	187	1660	2323	3283	3250	3229	4530
37	No reasons are given	4120	5279	4026	1274	1566	2017	2223	2734	3742	1906
	Total	8655	8857	8573	5036	7070	9115	11241	11855	11855 14355	14838

Source: Directorate of Economics and Statistics, Bangalore

measures like fogging of poisonous gas to the crevices of rats and inoculating patients against Plague.

Later, when the Government in 1952 started spraying of DDT and Melathion Insecticides to control Cholera and Malaria, the plague also came under control due to this. But in 1961-62, the disease again cropped up and caused deaths. Then the Government started Routine Inoculation and through this inoculation controlled the disease and took measures for eradication of Plague. Because of these measures at present the district is free from plague.

Since 1964, till date no deaths due to plague have been reported. Since 1960 to 1964 the number of deaths due to Plague were 9, 55, 68 and 10 respectively. During 1962 and 1963, 43,576 and 11,394 persons were inoculated. At present, the Plague control units are functioning in Kolar, Mulabagilu, Chintamani & Bangarapet.

Small Pox: Vaccination against this Small Pox disease which is a dreaded disease affecting mostly children was started by British Government way back in 1830. This disease is caused by a Virus "Variola" and it is a air borne disease. This disease was epidemic in 1949. It is found from records that this disease was there in 1957, 1958 and in 1961. During 1959, the Government appointed a committee to suggest measures for control and eradication of Small Pox and Cholera diseases. The Committee in its report suggested intensive vaccination and re-vaccination. In 1961 Small Pox Eradication Programme was started & under this Programme, initially the Children below one year should be given Primary Vaccination against Small Pox and after every 4 years revaccination was given. Due to intensive vaccination Programme in the District during 1963-64 under National Eradication Programme, the prevalence diseases was reduced. The trained Vaccinators gave the Vaccination. Each Vaccinator has to vaccinate a minimum of 3000 children in a year. In 1978 India became free from Small Pox.

Malaria: Malaria is seen universally and is caused by a Parasite Protozoan Plasmodium and four types of plasmodium cause malaria. They are 1) Plasmodium Vivax 2) Plasmodium falciparum 3)Plasmodium Malaria and 4)Plasmodium Ovale. The first three types are found in India. This disease is spread by Female Anopheles

Mosquito which breeds in stagnant water. Spraying of insecticides like DDT & MELATHION can control this disease. Now instead of DDT, Perithrum and Bleaching Powder are used. By giving 4 AQ (Quinine) tablets to the patients the disease is controlled. Even though the intensity of the disease came down due to implementation of National Malaria Eradication Programme in 1953, the Malaria cases are increasing in recent years, as per the records.

Even though Kolar District is not an epidemic for Malaria but due to heavy rains in 1944, Malaria was rampant in the district. It appeared in Bagepalli taluk in May 1944. Later it spread to Chintamani, Malur, Mulabagilu and Srinivasapura Taluks also. It was brought under Control due to spraying of insecticides and treatment of cases. Later in 1954 and in April 1955 it spread to Gudibande and Bagepalli taluks causing many deaths. Later in present years its menace is not there. The Progress made from 2001 to 2003 in the district under Malaria Control Programme is given below.

Year	No. of Blood Smears	No. of Blood Smears examined	No. of Positive cases confirmed
2001	421044	421044	3922
2002	482109	482109	14083
2003 [upto April]	135318	135318	1273

Source: District Malaria Officer, Kolar.

Leprosy: In order to control the spread of this dangerous disease National Leprosy Control Programme was started in second five-year plan with an objective to eradicate this disease by 2000 AD. Accordingly Leprosy Control Centres were established in places where the Leprosy was epidemic. Several voluntary centres were also established and they are helping in this cause and the Government financed these centres. The objectives for the establishment of these centres are as follows.

- 1) To identify the infected patients and making them to become non-infectius in short time.
- 2) Identify the cases at an early stage and start early treatment to prevent disability.
- 3) To Provide Health Education to the community so as to remove the misconceptions about the disease.
- 4) To provide rehabilitation to the cured leprosy patients.

To provide treatment to Leprosy patients, Government conducted surveys in leprosy-affected villages and to identify the number of Leprosy cases. Because of this, Taluk wise cases were available. The details are given below. The numbers given first shows the number of Villages affected and the number given in brackets shows the number of cases.

(1) Kolar Taluk-14(21), 2) Malur Taluk-36(72), 3) Srinivasapur Taluk-38(53), 4) Mulabagilu Taluk-54(144), 5) Chintamani Taluk- 18(26), 6) Shidlaghatta Taluk-26 (55), 7) Bangarapet Taluk-19 (30), 8) Gowribidanur Taluk- 29 (87), 9) Chikkaballapur Taluk-35 (66) 10) Gudibande Taluk 1(1) and 11) Bagepalli Taluk 3(7). It is seen that Sreenivasapura Taluk has more number of leprosy cases in the District. A Leprosy Control Centre was established in Gowribidanur during 1959. Surveys in 27 villages of this Taluk were conducted identifying 331 cases and treating 250 patients. The Multi Drug Regimen Therapy (MDT), which was started in 1992, has decreased the number of Leprosy cases, and our state was considered as the low infectious state at the end of 2001.

The office of the Leprosy Control Officer functioning at the District headquarters has the jurisdiction of the District. An Assistant Leprosy Officer, one Senior Laboratory Technician, one Assistant Statistical Officer and other staff were working in this office that comes under the control of District Health & Family Welfare Officer. Leprosy Control Unit is functioning in Batlahalli of Chintamani Taluk. The SET centres (Survey, Education & Treatment) working in different Taluks of the District is given below.

- I. Kolar Taluk: 1)S.N.R. Hospital, Kolar 2) Narsapura 3)Vokkaleri
- 4) Sagatur 5) Chamarahally 6) Kyalanur 7) Holur 8) Vemagal
- 9) Huthur. II Malur Taluk: 1) General Hospital, Malur
- 2) Masti 3) Lakkur 4) Tekal 5) Doddashivara 6) Toralakki.

III Bangarapet Taluk: 1) General Hospital, Bangarapet 2) Kamasamudra 3) Budhikote 4)Kyasamballi 5) Bethmangala 6)Guttahalli 7) Andersonpet and 8)Urigampet. IV Srinivasapura Taluk: 1) General Hospital, Srinivasapura 2) Koorgehalli 3) Yaldur 4) Somayajalahally 5) Dalasanur 6) Addagal 7) Royalpadu 8) Muttagadahally 9) Mudimadagu 10) Pulagurukote 11) Hogalagere 12) Nambihalli. V Mulbagilu Taluk: 1) General Hospital, Mulabagilu 2) Tayalur 3) Nangali 4) Devaraya samudra 5) Byrakur 6) Koladevi 7) Mallanayakanahalli and 8) Kurudumale. VI Chintamani Taluk: 1) General Hospital, Chintamani 2) Kaiwara 3) Murugamalla 4) Burudagunte 5) Yagavakote 6) Irangapally 7) Chinnasandra and 8) Kuruburu. VII Chikkaballapura Taluk: 1) General Hospital, Chikkaballapur 2) Dibbur 3) Nandi 4) Peresandra 5) Nayanahally and Muddenahally. VIII Bagepally Taluk: 1) General Hospital, Bagepally 2) Chelur 3) Gulur 4) Path Palya 5) Chakavelu and 6) Shivapura. IX Gudibande Taluk: 1) General Hospital. Gudibande. X Shidlaghatta Taluk: 1) General Hospital, Shidlaghatta 2) Melur 3) Sadali 4) Jangamakote 5) Bashethyhally 6) Gangigunte 7) Dibburahally 8) E.Thimmasandra 9) Hemarlahally. XI Gauribidanur Taluk: 1) General Hospital, Gowribidanur 2) Namagondlu, 3) Thondebhavi4) Manchenahalli 5) Vatada Hosahally 6) Hosur 7) Janareddyhally 8) Alipura 9) Idagur 10) Nakkalahalli and 11) Alakapura.

In the district 9,27,504 Persons were examined for identification of Leprosy infection during 1997-98. In that 795 persons had leprosy. (MB cases 242 & PB cases 553). Totally 1069 have been cured from leprosy disease. During 2001-02 and in 2002-03, 8,99,440 and 2,95,649 persons were examined, it was found that 1,010 and 553 had Leprosy infections and 885 and 867 cases were cured from leprosy respectively.

Cholera: Cholera and Gastroenteritis epidemic are a common occurrence in Karnataka and has become a Public Health Problem. Even though it is found as an endemic on several occasions it has become epidemic causing numerous deaths. Even though Kolar District is not an epidemic for Cholera, it is seen that the disease is spreading in the District. When this disease is identified, the Cholera Control Vigilance teams visit these affected places and take up control measures like Chlorination of water sources, spraying of

Insecticides like BHS, Pyrethrum to houses, destruction of flies, prohibition of selling of open foods and cut fruits and Anti Cholera Vaccination. Education of community is done by distribution of pamphlets /leaflets through Posters, Television and Film shows.

In 1952 & 1953, there was intensive spread of Cholera in the District. It was brought under Control through Universal Anti-Cholera Vaccination. Water sources were cleaned with potassium permanganate. During 1963-64, 64-65 and 1965-66, 43969, 38781 and 14366 people were given Anti-cholera Vaccination respectively. During 1997 and 1998, 35 and 25 persons died due to Cholera.

Fluorosis: If the Fluoride chemical content is more than the required level in the drinking water, Fluorosis disease is caused. This disease cannot be cured. In a few districts of the State it is seen that the Fluoride content is more in underground water. In Kolar district also, a few places have more Fluoride content in the underground water. It should not be more than 1mg per liter in drinking water (1PPM). The persons who use water having more content of Fluoride continuously suffer from this disease. This disease is found in 214 villages of 10 Taluks in the Kolar District. It is to be noted that this disease is seen in parts of the District, as the people are dependent on bore-well water in recent decades. The main symptoms of the disease are Joint pain, Muscle cramps, backache and low backache, thirstyness', tiredness and repeated urination. This disease has two types,

- 1) Dental Fluorosis: Brown dots are seen on the teeth initially and later these teeth turn into yellow colour and gradually decay.
- 2) Skeletal Fluorosis: The bones loose their stability become soft and the shape of the body changes. Gradually it becomes difficult for the patient to walk.

The government has implemented different kinds of activities by identifying the villages affected with Fluorosis and also surveying the sources of drinking water. At the initial stages the community is made aware of Flourosis in water and the doctors, Health staff, Government employees and members of voluntary organizations have been given two days training. During the second stage survey of social and environmental conditions, survey of water sources of

disease affected villages, identification of the content of Flouride in water and education of people not to drink the unsafe water are taken up.

The Water samples of 671 villages were examined and 214 villages were identified as having Flourosis. The number of villages in each taluk is given below. Kolar-19, Malur-52, Bangarapet - 9, Mulabagilu-33, Sreenivasapura-7, Chintamani-4, Chikkaballapur-17, Gudibande-6, Gowribidanur-16 and Bagepalli-50.

Japanese Encephalitis (Brain Fever): This disease is seen as Endemic in eastern parts of the state and the children are affected early. The viruses that are in animals (that too in pigs) spread the disease. All activities for control of Brain fever are carried out under the guidance and suggestions of Central Government. Central government is assisting in the control of Brain fever. The control measures like separating pigs from the residential areas in problematic villages, spraying of insecticides, treatment of suspected cases is taken up. 22 suspected cases of brain fever were reported in 2001, from 20 villages of the district and two persons died of this disease. 22 blood samples were collected and examined and it was confirmed that six persons had brain fever. 21 suspected cases were reported in 2002 from 10 villages and two persons died. Later 21 blood samples were collected and examined and it was confirmed that 4 persons were suffering from the brain fever. Several precautionary measures like conducting survey from the places where the brain fever cases were reported, collecting blood samples from the fever cases and subjecting them into examination, displacement of pigs from residential areas to a distance of 3 kms, control of mosquitoes, spraying of perythrem and village sanitation are taken up.

Dengue Fever: A virus, Dengue causes this disease and spread by Aedis aegyptii mosquitoes is seen in several parts of the district. This disease, which generally spreads in children with severe complications, has three types.

1) General Dengue 2) Dengue Haemorrage Fever (DHF) and Dengue Shock Syndrome (D.S.S.). Severe fever, headache, pain in muscles and joints and haemorrage are the symptoms of this disease. The dengue hemorrhage fever is very dangerous and it

sometimes lowers the blood pressure and causes the death of the patient. The mosquitoes are the carriers of the disease and due to their biting the disease spread. Destruction of mosquito breeding places, environmental sanitation, giving treatment to the patient having symptoms of dengue by taking him to the nearest hospital and health education are precautionary measures undertaken to control the disease. 266 blood samples were examined and 121 cases were treated in 28 villages of 8 taluks of the district in 2001. In this way during 2002, 163 blood samples from the suspected cases were collected and examined. 47 cases who had dengue fever were treated in 29 villages of 6 taluks. No deaths have occurred from this disease.

Tuberculosis: To control this disease and the health problem, the government has opened Tuberculosis Control Centres in the district in order to identify the cases and also to treat them. This district centre is implementing all the National Tuberculosis Control Programme activities. This programme is included in the general health services. Beds have been reserved in government and voluntary health institutions to the TB patients. Trained doctors and staff have been posted at these centres. BCG vaccination is given to children below one year age; the disease is diagnosed by examination of sputum and Xray methods. There are two kinds of treatment for TB.

1) Short term treatment (6 to 8 months duration) and 2) Long term treatment (12 months treatment)

The short-term treatment is given under revised national tuberculosis control progamme. The T.B. diagnosis and treatment is freely available in all the government hospitals and health centres. The revised national tuberculosis control programme is implemented since 2003 in Kolar district. Depending upon the population in the district, Five treatment units and 28 laboratories have been opened. A medical officer supervises each unit, one senior Treatment Supervisor and one Senior TB Laboratory supervisor are posted to each Centre. Kolar, Bangarapet, Mulbagilu, Gudibande and Shidlaghatta are treatment centres. Kamala Nehru TB and Chest Diseases hospital is also functioning in Kolar.

The District T.B. centre is working under the leadership of District T.B. Officer. All the Primary Health Centres in the district

diagnose the TB patients though sputum examination and give treatment to them. The Short term Treatment was started in 1989-90 in different districts of the state and is now functioning in all the Districts, All the General Hospitals in the District and the District Hospital has X-ray and Sputum Examination facilities. During 1996, 1997 and 1998 the number of patients who died due to 2001, 9,38,807 persons were examined and 3288 new cases were identified. During 2002, 980854 persons were examined and 1910 new cases were diagnosed and TB Treatment is being given to them.

District Tuberculosis Centre: The District TB Centre was established in 1964 in Kolar. It is under the administrative control of District Health & Family Welfare Officer. Three Senior Health Assistants two Laboratory Technicians one X-ray Technician and other staff members are working under the control of District TB Officer. The activities of this Centre include control of TB, Sputum Examination and distribution of drugs. This Centre co-operates with all levels of the health institutions in the district. This institution takes-up both short term and long term treatments. It also conducts Community Education Programmes.

AIDS: (Acquired Immuno Deficiency Syndrome)

AIDS is caused due to infection of HIV Virus. (Human Immuno Defficiency Virus). This can be attributed as lack of Immunity in man. The infected person loses his immunity and this is causing a health problem for the mankind. Repeated fever, Diarrhoea are the major symptoms of this disease. The HIV infection can be diagnosed with the help of 'ELISA' test. The Government started giving Health Education as a precautionary measure since 1987. The District Hospitals are functioning as Blood Test Centres. AIDS does not spread due to general contact. This spreads during Sexual Act and Blood donation from one person to another. From 1987 to 2001 (Till end of Dec), 219 HIV infected cases have been identified in the district and 4 persons have died due to this disease. This National AIDS Control Programme is implemented in the State as per the guidelines of National AIDS Control Organization of Government of India. It is 100% sponsored scheme. Karnataka AIDS Prevention Society has been established in this direction.

The Secretary, Health and Family Welfare Department is the Chairman of this Executive Committee. For identification of AIDS,

Voluntary Counseling and Testing centres and facilities are available in Sri. Narasimharaja Hospital. During 2001 and 2002, 29 and 26 HIV Positive cases have been identified in the District. From 1987 to December 2003, 530 cases (Cumulatively) HIV Positive Cases, and 49 AIDS Cases are there in the District and 6 have died due to AIDS.

Indian System of Medicine and Homeopathy

During 1972, the Indian System of Medicine and Homeopathy was bifurcated from Health Department and a separate Directorate has been formed. This directorate includes Ayurveda, Unani, Sidda, Naturopathy, Yoga and Homeopathy. This directorate has control over development of local system of Medicine, providing Health services to the rural people, and preparation of Ayurveda & Unani drugs. This also monitors development of gardens related to Medicinal plants & herbs. The Ayurvedic hospitals are functioning at Srinivasapura and Somayajalahally (Srinivasapura Taluk), Chikkatirupathy and Shivarapatna (Malur Taluk), Chendhur and Somenahalli (Gudibande Taluk) Seesandra (Kolar Taluk) and Amblikal (Mulbagilu Taluk) in Kolar District. Unani hospitals are functioning in Kolar and Chintamani.

Ayurveda: In the Ancient Indian Medical field, Ayurveda supposed to be the Library of Medical knowledge of our country. Even though it originated during Vedic age, it has maintained its greatness and popularity in spite of lapse of several centuries.

There is enormous knowledge about the life and age of man, care of the body and treatment in Ayurveda. The type of treatment for different diseases is explained in this method. The Ayurveda has three philosophies namely Vatha, Pittha and Kaffa, and any variation in them causes disease. This system of medicine suggests the treatment for this Tri-dosha. The books of 'Sushrutha' and 'Charaka' Samhithe are the prominent medical encyclopaedias, which are the foundations of Indian Ayurvedic System. A book on 'Ashtanga Hrudaya Samhithe" by Vaghbhatana is a highly recognized rare book in South India. It is divided into Eight sections namely Ear, Nose, Eye, Throat, Dental Disease, Body Treatment, Paediatric, and Poisonous science. Charaka Samhita gives details about Air, Water, Environmental pollution and Communicable diseases. Even now the

Government has recognized it as a system of medicine and is encouraging it. Even after the Allopathy, which came into being after the arrival of Britishers to India made the people to lose confidence in Ayurveda. Even then Ayurveda has maintained its popularity and is developing along with Allopathy.

The Ayurveda system of medicine is in vogue in all the Taluks of the district. Many doctors after obtaining their Ayurvedic degrees have opened their clinics and are treating patients. Homeopathy is also practiced in the district and many doctors are practicing this system of medicine too. Recently a Homeopathy unit has been established in SNR District Hospital and treatment is given to patients. But, Sidda and Naturopathy systems are not popular here.

Yoga: Now-a-days Yoga has become prominent. Padmabhushana Dr. B.K.S. Iyengar, a great Yoga therapist, who hails from Bellur of Narsapura is a student of Prof. T. Krishnamachar, has written many books on Yoga Science and has spread Yoga throughout the world. By establishing Smt. Ramamani Iyengar Memorial Yoga Institute in 1995 he has carried it to the International Level by spreading the importance of Yoga.

Karnataka State Ayurveda Prachara Parishath.

The Karnataka State Ayurveda Prachara Parishath was established in 1997 at Kolar. The objectives of this organization are, to conduct free Ayurveda camps throughout the district to create awareness about Ayurveda by conducting demonstration of Medicinal plants in Schools & Colleges, encouraging the authors of Medical books, creating awareness about AIDS, Diabetes and Cancer like diseases, removal of misconceptions, identifying Fake doctors and handing over to the Government for action, encouraging the growers of Medicinal plants and also to honour the Ayurvedic doctors who provide yeoman service to the community. At the beginning it had Five members and at present it has 58 members. It has an objective to provide service to the poor people through Indian System of Medicine, and has requested to release Rs.638,520 and soon after the release of grants, it has plans to provide necessary medical facilities for Two years to the poor people of 48 villages.

Medical Institutions

The progress made after the Independence in providing Disease

Control measures and treatment services by the Government is noteworthy. The Govt. of India has given much stress towards rural health in its Five Year Plans and has increased Health network also. Based on the policy of the Govt. to provide better medical services, the Govt. has extended health services by establishing Primary Health Units and Primary Health Centres in rural areas, Government hospitals at Taluk levels, District Hospitals, and Special Treatment Hospitals, at District levels having Specialist Doctors. Hundreds of Nursing Homes, Maternity Hospitals and Treatment centres are also functioning in the private sector, supplementing the Govt. services. Functioning of a few Medical Institutions are discussed below.

District Hospital: The District hospital, which comes under the administrative control of District Surgeon, provides curative services. It is also functioning as a referral hospital. Every District hospital provides the following Specialist Services. 1) Medical Care 2) Surgeries, 3) Obstetric care and Gynaecology, 4) Paediatric care, 5) Orthopaedic care, 6) Ophthalmic care, 7) Ear, Nose and Throat care, 8) Skin and Venereal Diseases care, 9) X-ray facility, 10) Anaesthetic services, 11) Dental care, 12) Mental Health Care, 13) Blood bank and 14) Physiotherapy Services.

Narasimharaja District Hospital, Kolar: His Highness Maharaja Sri Narasimha raja Odeyar, constructed this Hospital in 1937. It has an area of 10 acres. The hospital, which earlier had 265 beds, has now been increased to 400 beds strength. Since 1999 this hospital is the teaching hospital for Sri Devaraja Urs Medical College. On an average nearly 800 to 1100 Out Patients visit this hospital for treatment and counselling. This hospital is having different modern equipments and providing medical services. This hospital is having 20 different types of divisions namely Emergency division, Medicine division, Surgical division, Obstetric & Gynaecology division, Paediatric division, Orthopaedic division, Dermatology division, ENT division, HIV / VCTC (Voluntary Counselling and Testing Centre), Communicable diseases treatment division, Laboratory, Xray unit, Ultrasound, Blood Bank, Mental Health Treatment Centre, ANM training division, Burns wards treatment division, Physiotherapy division, and PPTCT sections (Prevention of Parent to Child Transmission)

Vaccines are given to protect pregnant mothers and newborn children. Anti Poisonous Vaccines are also given for Snake bites and Dog bites. Before giving Blood, HIV examination is also done. Facility of Ambulance is also there. There is a separate ward for Communicable Diseases. Communicable Diseases Surveillance Unit and Laboratory are functioning here.

Table 15.3: Details of Services Provided and Deaths
Occurred in the District Hospital

SI.			YEARS	
No.	Particulars	200-01	2001-02	2002-03
1	GENERAL SERVICES			
1)	OUT PATIENTS	276816	308941	227666
2)	IN PATIENTS	15276	14430	13921
3)	SURGERIES	5477	3258	3232
4)	OBSTETRIC CARE	2105	2212	2834
5)	X-RAY	10421	9967	10814
Ш	FAMILY WELFARE PROGRAMME			
1)	STERILIZATION OPERATIONS	762	696	827
2)	IUCD INSERTIONS	552	441	550
3)	ORAL PILL USERS	8208	5010	6870
4)	NIRODH USERS	4149	8609	12350
111	MOTHER & CHILD HEALTH PROGRAMME			
1)	D P T VACCINE	2040	1928	1846
2)	POLIO DROPS	2040	1928	1846
3)	BCG	4726	4485	-
4)	D & T	1254	803	926
5)	T,T (FOR MOTHERS)	2147	2136	2216
6)	TT (10 YEARS CHILDREN)	1100	. 1039	620
7)	MEASLES VACCINE	1509	1464	1499
IV	OTHER TREATMENTS			
1)	MTP	216	210	191
2)	CATARACT OPERATIONS	478	522	360
3)	NO. OF NEW BORN DEATHS	42	75	38
4)	NO. OF MOTHER DEATHS DURING DELIVERY	06	09	03

Source: General Hospital, Kolar

General Hospital KGF: His Highness Maharaja Sri Krishnaraja Odeyar inaugurated this hospital in 1951. It is a 150 bedded hospital having its own building. Besides there is a 100-bedded hospital for Women and Children, and 30 bedded hospital for Communicable diseases under its control. In the beginning was called as Civil Hospital. During 2002 Government has taken up repairs and extension of this hospital under Karnataka Health Development Project and District Surgeon is the administrator of this hospital. This hospital has all the facilities of a District Hospital in providing treatment. This hospital has Blood bank, X-ray unit, Laboratory facility, Operation theatres, ECG sections, Scanning sections, Ophthalmic Unit, Emergency Care, Medical Section and Surgery section also. Nine senior specialists and 91 other staff members are working in this hospital.

Table 15.4: Details of Services Provided and Deaths
Occurred in KGF Hospital

SI.	Destinulare		YEARS	
No.	Particulars	200-01	2001-02	2002-03
1	2	3	4	5
l	GENERAL SERVICES			
1)	OUT PATIENTS	368763	406964	478975
2)	IN PATIENTS	6804	13854	10475
3)	SURGERIES	1174	1225	1046
4)	OBSTETRIC CARE	3331	2817	3024
5)	X-RAY	-	_	_
II	FAMILY WELFARE PROGRAMME			
1)	STERILIZATION OPERATIONS	801	1920	1045
2)	IUCD INSERTIONS	494	441	481
3)	ORAL PILL USERS	247	275	262

SI.	Particulars		YEARS	
No.	• • • • • • • • • • • • • • • • • • • •	200-01	2001-02	2002-03
1	2	3	4	5
4)	NIRODH USERS	285	267	279
Ш	MOTHER & CHILD HEALTH PROGRAMME			
1)	DPT VACCINE	1151	1367	1288
2)	POLIO DROPS	1151	1367	1288
3)	BCG	2400	2429	2292
4)	D & T	1080	1078	799
5)	TT (FOR MOTHERS)	1644	2005	1450
6)	TT (10 YEARS CHILDREN)	851	663	957
7)	MEASLES VACCINE	997	1149	1215
IV.	OTHER TREATMENTS			
1)	MTP	168	150	204
2)	CATARACT OPERATIONS	-	-	-
3)	NO. OF NEW BORN DEATHS	3	4	-
4)	No. OF MOTHER DEATHS, DURING DELIVERY	2	-	<u>-</u>

Source: General Hospital K.G.F.

General Hospital, Chikkaballapura: This hospital was started in 1956 as a Combined Dispensary. This hospital earlier had a strength of 30-bed. Now the Government has upgraded this to 60-bedded hospital. This has been converted into 100-bedded hospital under KHDP in 1993 and the civil works were completed. At present 7 doctors including the Administrative doctor and 64 other staff members are working in this hospital. This hospital has the facilities of Maternity care, X-ray division, Laboratory, and other facilities like Ambulance. The diseases, which are commonly seen in summer season like, Gastro-enteritis, Malaria, and Typhoid are given treatment. The specialist services like Obstetric and Gynaecology, General surgery, Ear, Nose and Throat, Paediatrics, Ophthalmology, Anaesthesia, Orthopaedics Surgeon, and Dentistry are also provided in this hospital.

Table 15.5 : Details of Medical Services Provided by General Hospital, Chikkaballapur

(in numbers)

SI.	Particulars		YEARS	
No.		200-01	2001-02	2002-03
1	2	3	4	5
ı	GENERAL SERVICES			
1)	OUT PATIENTS	194741	244779	267011
2)	IN PATIENTS	7288	6714	10103
3)	OBSTETRIC CARE	1566	1033	1359
4)	SURGERIES	279	370	620
5)	TB PATIENTS TREATED	147	158	139
6)	LEPROSY PATIENTS TREATED	07	18	09
II	FAMILY WELFARE PROGRAMME			
1)	STERILIZATION OPERATIONS	539	515	542
2)	IUCD INSERTIONS	355	375	√ 365
3)	ORAL PILLS USERS	250	232	260
4)	NIRODH USERS	250	340	380
111	MOTHER & CHILD HEALTH PROGRAMME			
1)	DPT VACCINE	1301	1053	1177
2)	POLIO DROPS	1301	1053	1177
3)	D&T	338	903	1018
4)	BCG	1563	1255	1534
5)	TT (FOR PREGNANT MOTHERS)	336	1574	1505
6)	MEASLES	1265	936	1025
7)	TT (FOR 10 YEARS CHILDREN)	454	859	986
8)	TT (FOR 16 YEARS)	. 120	824	719

Source : General Hospital Chikkaballapura

General Hospital, Chintamani: This hospital, which was started as a Combined Dispensary in 1938, had the facility of 30 beds in the beginning. Later it became 50-bedded hospital. After the completion of new building of the hospital in 2002, the hospital is functioning with 100 beds strength, the civil works undertaken by Karnataka Health System Development Project. The Taluk Health Officer is the Chief Medical Officer of this hospital. Along with him Eight Senior Specialists and 54 other personnel are working in this hospital. Gastroenteritis, Malaria, Dengue Fever and Brain Fever are seen in the jurisdiction of this hospital and the patients are getting treatment for these ailments. Obstetrics and Gyneacology, Ophthalmic care, Orthopaedic, Anaesthesia; General Surgery, ENT, Dentistry and X-ray facilities are available here.

Table 15.6.: Details of Medical Services Provided by General Hospital, Chintamani (in numbers)

SI.			YEARS	
No.	Particulars	200-01	2001-02	2002-03
1	2	3	4	5
ı	GENERAL SERVICES	,		
1)	OUT PATIENTS	38494	33332	59189
2)	IN PATIENTS	4556	4188	12670
3)	SURGERIES	784	875	891
4)	OBSTETRIC CARE	1109	970	1058
5)	X-RAY	1257	402	330
6)	LEPROSY PATIENTS TREATED	25	15	19
7)	TB PATIENTS TREATED	63	84	186
П	FAMILY WELFARE PROGRAMMES			
1)	STERILIZATION OPERATIONS	394	326	319
2)	IUCD INSERTIONS	319	324	238

SI.	Particulars		YEARS	
No.	r atticulais	200-01	2001-02	2002-03
1	2	3	4	5
3)	ORAL PILLS USERS	136	144	136
4)	NIRODH USERS	1440	1550	30380
Ш	MOTHER & CHILD HEALTH PROGRAMME			
1)	DPT VACCINE	1280	1260	1298
2)	POLIO DROPS	1280	1260	1298
3)	D & T	923	1471	553
4)	BCG	1870	2100	2460
5)	TT (FOR PREGNANT MOTHERS)	1345	1263	1212
6)	MEASLES	1194	1159	1202
7)	TT (FOR 10 YEARS CHILDREN)	628	1248	531
8) -	TT (FOR 16 YEARS)	485	819	490

Source: General Hospital, Chintamani

General Hospital Gauribidanur: This hospital was started in 1935 with a bed strength of Six. Later in 1950 it was converted into a Combined Dispensary with 16 bedded strength. In 1982, it was a upgraded as a General Hospital with bed strength of 50. In 1999 due to extension of civil works under the Karnataka Health System Development Project the Government upgraded this into a 100-bedded hospital. Dental unit was added to this hospital as early as 1971. In 1976, 24 bedded Sterilization ward and in 1983, 20-bedded Leprosy wards were established. Presently this hospital has the facilities of Maternity section, X-ray unit, Laboratory, Ultrasound Scanning Division, Emergency section, and E. C. G. This hospital provides ophthalmic care, Obstetrics and Gynaec care, Dental care, Family Welfare Services, Surgeries, and Treatment unit for Tuberculosis Patients.

Table 15.7: Details of Medical Services Provided by General Hospital, Gauribidanur (in numbers)

SI.	Particulars		YEARS	
No.	Particulars	200-01	2001-02	2002-03
1	2	3	4	5
1	GENERAL SERVICES			
1)	OUT PATIENTS	123285	123678	133678
2)	IN PATIENTS	7194	7318	7351
3)	OBSTETRIC CARE	753	514	666
4)	SURGERIES	189	307	251
5)	TB PATIENTS TREATED	434	488	449
6)	LEPROSY PATIENTS TREATED	80	76	82
7)	X-RAY	7251	7884	6221
11	FAMILY WELFARE PROGRAMME	,		y
1)	STERILIZATION OPERATIONS	2001	1607	1503
2)	IUCD INSERTIONS	15	10	09
3)	ORAL PILLS USERS	-	-	-
4)	NIRODH USERS	8560	6550	9460
Ш	MOTHER & CHILD HEALTH PROGRAMME			
1)	DPT VACCINE	706	664	729
2)	POLIO DROPS	706	664	729
3)	D & T	881	746	815
4)	BCG	1654	1598	1364
5)	TT (FOR PREGNANT MOTHERS)	891	870	957
6)	MEASLES	540	526	640
7)	TT (FOR 10 YEARS CHILDREN)	979	879	887
8)	TT (FOR 16 YEARS)	922 5	879	951
9)	MTP DONE	25	20	15

Source: General Hospital Gauribidanur.

General Hospital, Srinivasapura: This hospital was started as a local fund dispensary and was upgraded by the Government as a Taluk hospital with a 50-bed strength. This Institution was renovated under Karnataka Health System Development Project in 2001 and, 34 Sub centres are working under this institute. Maternity section, X-ray unit and Laboratory facilities are available here. Obstetric Care, Paediatric Care, Family Welfare Programme and specialized Treatment services are also provided in this organization. Deputy Surgeon is the Chief Medical Officer and Five Specialized Doctors, a Dental Doctor and 71 Paramedical staff assist him.

Table 15.8: Details of Medical Services Provided by General Hospital, Srinivasapura

SI.	Particulars		YEARS	
No.	Faiticulais	200-01	2001-02	2002-03
1	2	3	4	5
1	GENERAL SERVICES			
1)	OUT PATIENTS	71778	93987	111162
2)	IN PATIENTS	465	908	3167
3)	OBSTETRIC CARE	689	328	376
4)	SURGERIES	16	528	551
5)	TB PATIENTS TREATED	18	59	142
6)	LEPROSY PATIENTS TREATED	-	-	-
7)	X-RAY'S TAKEN	-	77	516
Ш	FAMILY WELFARE PROGRAMME			
1)	STERILIZATION OPERATIONS	1544	1433	1785
2)	IUCD INSERTIONS	1479	1398	1479
3)	ORAL PILLS USERS	8365	8382	6518
4)	NIRODH USERS	46881	48937	57083

SI.	Particulars		YEARS			
No.		200-01	2001-02	2002-03		
1	2	3	4	5		
111	MOTHER & CHILD HEALTH PROGRAMME					
1)	DPT VACCINE	4337	4522	4331		
2)	POLIO DROPS	4337	4522	4331		
3)	D & T	3766	3636	3621		
4)	BCG	4107	3860	3758		
5)	TT (FOR PREGNANT MOTHERS)	5023	5002	4529		
6)	MEASLES	4020	4025	3761		
7)	TT (FOR 10 YEARS CHILDREN)	4280	3367	4902		
8)	TT (FOR 16 YEARS)	1550	2071	1953		

Source: General Hospital Srinivasapura.

General Hospital, Shidlaghatta: This was started in 1965 as a Combined Dispensary and in 1979, it was converted in to a 24-bedded Primary Health Centre. This was again upgraded into 30 bedded Community Health Centre. Since 1998 it is a General having Hospital with 50 beds strength. It has its own building. It is providing Maternity Services. It has X-ray Unit & Laboratory. Treatment is given for Eye and Dental diseases apart from the Patients of Tuberculosis & Leprosy. Nine Sub Centres are functioning under this organization. Treatment facilities for Gastro-enteritis, Malaria, TB and Leprosy are available here. Specialists in the field of obstetrics and Gynaecology, Surgery, Dentistry, Paediatrics and Anaesthesia units are working in this hospital.

Table 15.9: The Details of Medical Services Provided by General Hospital, Shidlaghatta (in numbers)

SI.	D. d. L.		YEARS		
No.	Particulars	200-01	2001-02	2002-03	
1	2	3	4	5	
i	GENERAL SERVICES				
1)	OUT PATIENTS	63385	73335	96345	
2)	IN PATIENTS	5673	3494	3284	
3)	OBSTETRIC CARE	702	933	736	
4)	SURGERIES	<u>.</u>	-	-	
5)	TB PATIENTS TREATED	210	304	171	
6)	LEPROSY PATIENTS TREATED	13	11	05	
7)	X-RAY'S TAKEN	259	1210	907	
II	FAMILY WELFARE PROGRAMME				
1)	STERILIZATION OPERATIONS	602	404	482	
2)	IUCD INSERTIONS	552	410	440	
3)	ORAL PILLS USERS	223	240	244	
4)	NIRODH USERS	167	232	264	
III	MOTHER & CHILD HEALTH PROGRAMME				
1)	DPT VACCINE	1460	1432	1306	
2)	POLIO DROPS	1460	1432	1306	
3)	D&T	1252	1347	1771	
4)	BCG	1477	1554	1358	
5)	TT (FOR PREGNANT MOTHERS)	1682	1628	1431	
6)	MEASLES	1391	1269	1253	
7)	TT (FOR 10 YEARS CHILDREN)	1098	1355	1580	
8)	TT (FOR 16 YEARS)	903	1083	1120	
9)	BLOOD SMEARS TAKEN FOR MALARIA	4529	5265	5849	
10)	MALARIA CASES IDENTIFIED	03	28	184	

Source: General Hospital Shidlaghatta.

General Hospital, Malur: This Hospital, formerly known as Maharaja's Charitable Hospital, was started in 1908. In 1917 it started functioning in its own building. In 1956 it became a Combined Dispensary and in 1958 the Government converted it into a Primary Health centre. It was upgraded as a General Hospital in 1984 with 50 beds strength. Karnataka Health System Development Project has taken up the extension of the building. This hospital has the facilities of Maternity section, X-ray unit, Laboratory services, and Operation theatres. Special facilities like Ophthalmic care and Obstetric and Gynaec care are also available here. Chief Medical Officer assisted by one lady Medical Officer, consisting of Four Doctors including one Dentist and other 76 staff is working in this hospital. This hospital gives treatment to Malaria, Tuberculosis, Typhoid and Gastro-enteritis cases also.

Table 15.10: Details of Medical Services Provided by General Hospital, Malur

SI.	Particulars		YEARS 2001-02 2002-03	
No.	. artiourary	2000-01		2002-03
1	2	3	4	5
ı	GENERAL SERVICES			
1)	OUT PATIENTS	58632	72219	93368
2)	IN PATIENTS	1750	2180	2464
3)	OBSTETRIC CARE	712	704	698
4)	SURGERIES	-	-	-
5)	T.B PATIENTS TREATED	20	81	11
6)	LEPROSY PATIENTS TREATED	-	•	-
7)	X-RAY'S TAKEN	776	597	856

SI.	Particulars		4630 4905 8470 4905 3957 5549	
No.	Faiticulais	200-01		2002-03
1	2	3	4	5
II	FAMILY WELFARE PROGRAMME			
1)	STERILIZATION OPERATIONS	1538	1423	1692
2)	IUCD INSERTIONS	1551	1363	1319
3)	ORAL PILLS USERS	783	New-813	New-850
			Old-908	Old-2400
4)	NIRODH USERS	2250	3407	3910
111	MOTHER & CHILD HEALTH PROGRAMME			
1)	DPT VACCINE	4992	4630	4905
2)	POLIO DROPS	10498	8470	4905
3)	D & T	3425	3957	5549
4)	BCG	5506	3840	9774
5)	TT (FOR PREGNANT MOTHERS)	5906	5114	5549
6)	MEASLES	4834	4403	4688
7)	TT (FOR 10 YEARS CHILDREN)	3165	3524	3598
8)	TT (FOR 16 YEARS)	1380	1586	1617

Source: General Hospital, Malur.

General Hospital, Bagepalli: This Hospital, which was started as Local Fund Dispensary in 1806 was gradually upgraded as Primary Health Unit, Primary Health Centre & Community Health Centre by the Government. At Present this Hospital has its own building with 50-bedded strength. This Hospital has Maternity Section, X-ray Unit and Laboratory facilities. 28 Sub Centres are functioning under this Unit. This hospital is providing treatment to Diarrhoea cases, Gastro enteritis, Japanese encephalitis, Malaria and Dengue fever cases, which are communicable diseases that are seen now. There are 121 personnel working in this centre including one Taluk Medical Officer and Six Specialist Doctors.

Table 15.11: Details of Medical Services Provided by General Hospital, Bagepalli

SI.	Particulars		YEARS			
No.	Faiticulais	200-01	2001-02	2002-03		
1 .	2	3	4	5		
1	GENERAL SERVICES					
1)	OUT PATIENTS	83055	151167	158344		
2) .	IN PATIENTS	2511	2447	1925		
3)	OBSTETRIC CARE	296	388	319		
4)	SURGERIES	42	89	79		
5)	T.B PATIENTS TREATED	314	368	295		
6)	LEPROSY PATIENTS TREATED	26	26	32		
7)	X-RAY'S DONE	-	-	162		
	FAMILY WELFARE PROGRAMME		,			
1)	STERILIZATION OPERATIONS	1528	1609	1345		
2)	IUCD INSERTIONS	1226	1222	1119		
3)	ORAL PILLS USERS	259	344	486		
4)	NIRODH USERS	374	578	610		
111	MOTHER & CHILD HEALTH PROGRAMME					
1)	DPT VACCINE	3532	3549	3739		
2)	POLIO DROPS	3532	3549	3739		
3)	D & T	3296	3709	3220		
4)	BCG	3679	3509	3570		
5)	TT (FOR PREGNANT MOTHERS)	3296	3709	3220		
6)	MEASLES	3419	3491	3783		
7)	TT (FOR 10 YEARS CHILDREN)	3042	3113	3179		
8)	TT (FOR 16 YEARS)	1495	2025	1550		

Source : General Hospital, Bagepalli.

General Hospital, Bangarapet: General Hospital at Bangarapet established in 1951, has now the strength of 35 beds, providing all kinds of Medical care. This hospital has Three Sub centres under its control. This hospital has Maternity section, X-ray unit, Laboratory, and Operation theatre units. It has facility of 1st level care of ophthalmic and Cardiac treatments. Fever, Gastr-enteritis, TB and other diseases are seen in the vicinity of this hospital and for these diseases, treatment facility is available in this hospital. There is a Postmortem Centre attached to this hospital.

Table 15.12 : Details of Medical Services Provided by General Hospital, Bangarapet

SI.	Particulars	YEARS		YEARS
No.	Particulars	200-01	2001-02	2002-03
1	2	3	4	5
ı	GENERAL SERVICES			
1)	OUT PATIENTS	70899	85480	79193
2)	IN PATIENTS	1415	1369	1378
3)	OBSTETRIC CARE	732	198	217
4)	SURGERIES(Minor& Major)	187	791	1108
5)	T.B PATIENTS TREATED	18	28	15
6)	LEPROSY PATIENTS TREATED	-	_	
7)	X-RAY'S TAKEN &SCREENINGS	726	622	779
[]	FAMILY WELFARE PROGRAMME			
1)	STERILIZATION OPERATIONS	288	195	234
2)	IUCD INSERTIONS	488	465	455
3)	ORAL PILL USERS	291	289	314
4)	NIRODH USERS	164	191	141

SI.	Particulars	YEARS			
No.	i articulars	200-01	01 2001-02 20	2002-03	
1	2	3	4	5	
111	MOTHER & CHILD HEALTH PROGRAMME				
1)	DPT VACCINE	1271	1288	1289	
2)	POLIO DROPS	2138	2147	1384	
3)	BCG	1338	1317	1356	
4)	MEASLES	950	1030		
5)	D&T	1634	1627	1548	
6)	TT (FOR PREGNANT MOTHERS)	1283	1306	1264	
7)	TT (FOR 10 YEARS CHILDREN)	925	786	698	
8)	TT (FOR 16 YEARS)	688	592	911	

Source: General Hospital, Bangarapet.

R.L. Jalappa Hospital and Research Centre, Tamaka: This Private Hospital, which is a High-tech teaching, and General Hospital in the District was started at Tamaka, near Kolar in 1994. This hospital has its own building and having a bed strength of 550, has modern treatment facility and equipments. This is a major hospital in the District. This hospital is working as a teaching hospital attached to Sri. Devaraj Urs Medical College. This hospital has facilities like Modern laboratory, 14 well equipped operation theatres. Blood bank, Ventilators, HIV Test unit, Radiology, CT Scanning, Treadmill. X-ray unit, Endoscopy, Ultra-sound (including Colour Doppler), E. C. G, Intensive Care Unit (ICU), Casualty, Pharmacy, Mortuary etc. Recently it has started Cobalt Treatment unit & is likely to start Haemo - Dialysis Unit. This hospital has General Medicine, Tuberculosis & Chest Diseases, General Surgery, Obstetrics and Gynaecology, Paediatric, Orthopaedic, E N T, Ophthalmic, Skin and Venereal Diseases, Dental care, Mental health, Family Welfare and other treatment divisions. Apart from Super Specialty facilities like Urology, Neurology, Neurosurgery, Paediatrics, Surgery, Plastic Surgery, Cardiology, Medical oncology, and Radiotherapy are also available here.

Superintendent is the Chief Administrator of this hospital and it has 126 Specialist Doctors as well as 298 other staff members. This hospital arranges Cancer detection camps and Cancer awareness camps, along with free delivery services for pregnant mothers.

Table 15.13: Details of Medical Services Provided by R.L. Jalappa Hospital and Research Centre, Tamaka (in numbers)

SI.	Destinulare		YEARS	
No.	Particulars	200-01	2001-02	2002-03
1	2	3	4	5
1	GENERAL SERVICES			
1)	OUT PATIENTS (daily average)	575	650	700
2)	IN PATIENTS (daily)	280	320	360
3)	OBSTETRIC CARE	250	300	340
4)	SURGERIES (Minor & Major)	2679	2712	3008
5)	X-RAY'S TAKEN	9941	9889	10503
6)	ULTRA SOUND	3574	3540	3797
7)	CT SCAN	-	1321	1762
8)	No. OF TB PATIENTS	25	27	32
II	FAMILY WELFARE PROGRAMME			
1)	STERILIZATION OPERATIONS	275	290	300
2)	IUCD INSERTIONS	175	190	210
3)	ORAL PILLS USERS	60	70	82
4)	NIRODH USERS	80	100	130
III	MOTHER & CHILD HEALTH PROGRAMME			
1)	DPT VACCINE .	424	436	485
2)	POLIO DROPS	545	626	705
3)	BCG	416	518	612
4)	TT (FOR PREGNANT MOTHERS)	72	68	112
IV	OTHER TREATMENTS			
1)	MTP	38	34	15
2)	CATARACT OPERATIONS	246	315	380
3)	NEW BORN DEATHS	57	. 39	33
4)	DEATH OF MOTHERS DURING DELIVERY.	07	08	12
<u> </u>	DEATH OF MOTHER OF THE		<u></u>	

Source: R.L. Jalappa, Hospital Kolar

C.S.I. Hospital, Chikkaballapur: The Church of South India Hospital, which is recognized as the Oldest and Popular hospital in Chikkaballapur is a Missionary hospital eastablished during 1913 in an area of 5 acres land. The foundation stone was laid by Dr. I. P. Rice and was inaugurated by the then Deputy Commissioner of Kolar District Sri. P. F Bowring on 26th Feb 1913. The hospital with a 60-bed strength has different sections like X-ray Unit, Laboratory, Emergency Treatment Unit, and Operation Theatre, Leprosy division, Maternity section and Out Patient section. This hospital has its own Electricity-manufacturing Unit. Ambulance and modern Medical equipments are also available. The treatment for Tuberculosis was started in 1941. Vaccination against Small Pox was given to 12,000 Persons in 1942. During 1943, 15,000 were immunized against Small Pox and it was considered as yeoman service and a great achievement. Leprosy division was started in 1986. In 1989 Nursing hostel and in 1993 Nursing schools were opened. Four bedded new Labour ward was added to this hospital in 1996. It has 10-bedded Paediatric section also. At present this hospital is having modern treatment facilities with 150-bed strength.

Table 15.14: Details of Medical Services Provided by CSI Hospital, Chikkaballapura (in numbers).

SI.	Particulars		YE	ARS	
No.		2000	2001	2002	2003
1	2	3	4	5	6
1	GENERAL SERVICES				
1)	OUT PATIENTS	26127	25438	25422	22590
2)	IN PATIENTS	6050	6264	6371	5455
3)	SURGERIES	995	1045	1187	1017
4)	OBSTETRIC CARE	995	976	956	782
5)	X-RAY'S DONE	1634	1386	1332	1383
11	FAMILY WELFARE PROGRAMME				
1)	STERILIZATION OPERATIONS	272	217	193	246
2)	IUCD INSERTIONS	107	50	94	57

SI.	Particulars		YEA	ARS	
No.	Particulais	2000	2001	2002	2003
3)	ORAL PILLS USERS	17	18	20	07
4)	NIRODH USERS	-	_	-	-
111	MOTHER & CHILD HEALTH PROGRAMME				
1)	DPT VACCINE	508	515	497	467
2)	POLIO DROPS	1529	1468	1521	1367
3)	BCG	838	826	812	806
4)	D & T	-	-	<u>-</u>	-
5)	TT (FOR PREGNANT MOTHERS)	336	307	318	290
6)	TT (FOR 10 YEARS CHILDREN)	14	16	10	12
7)	MEASLES	-	-	-	-
IV	OTHER TREATMENTS				
1)	MTP	-	-	-	-
2)	CATARACT OPERATIONS			-	<u> </u>
3)	NEW BORN DEATHS	118	111	86	64
4)	MATERNAL DEATHS DURING DELIVERY.	-	2	-	05
3)	NEW BORN DEATHS	118		86	

Source: CSI Hospital Chikkaballapura.

Kamala Nehru Tuberculosis and Chest Diseases Hospital: This hospital was constructed in an area of nine hectares of GajaluDinne Plantation area on Bangarapet Road in the outskirts of Kolar Town. The hospital building was inaugurated by Smt. Indira Gandhi in 1955 and started functioning. This was nominated as Kamala Nehru Tuberculosis and Chest Diseases Hospital in memory of Smt.Kamala Nehru who died of Tuberculosis. It was 160-bedded hospital at the beginning and later it is increased to 264 in phases. Sri. V.H.Chennabasaiah got the Administrative block of the Hospital constructed from his own funds on Charity basis.

The Hospital has different sections namely common ward of 12 rooms, special ward of 8 rooms, Administrative block, Kitchen and Drug stores, X-ray unit. Sputum examination facility, ESR Blood examination, ECG and Spirograph facilities are available in this

hospital. The Medical Superintendent is the Administrator of this hospital. 90 staff members including three doctors and 22 Nurses are working in this hospital.

Table 15.15: Details of Medical Services Provided by Kamala Nehru

TB and Chest Disease Hospital, Kolar

(in numbers)

	Particulars		YEARS	
	Tarticulars	2000-2001	2001-2002	2002-2003
1)	OUT PATIENTS TREATED	7692	6712	6368
2)	IN PATIENTS TREATED	2938	2447	2041
3)	X-RAY TAKEN	5540	2575	4299
4)	TB PATIENTS TREATED	2292	2123	2187
5)	SPUTUM EXAMINATIONS DONE	7616	6819	5885

Source: Kamala Nehru Tuberculosis and Chest Diseases Hospital, Kolar.

Rural Health Programmes: In rural areas prior to independence health and medical services were limited. It was limited to spraying of insecticides to prevent the spread of Plague and Cholera and giving Vaccination. Through five-year plans, the Government increased its medical facilities in rural areas. The essential basic health services namely Maternity services, Delivery services, Family welfare services are also provided apart from control of Communicable Disease Programmes. Not only establishing Primary Health Units and Primary Health Centres in rural areas, but also upgrading the existing medical treatment services, has improved the quality of providing health services. The entire National and State Level Health Programmes have been made to reach the rural people through Health institutions.

Community Health Centres

The Community Health Centres are generally established in Taluk centres or in Villages where the population is more. One Community Health Centre is established for every one lakh Population or for every Four Primary Health Centres. Generally these Centres will have 30 to 50 beds strength. These units function as referral units for the lower institutes in its jurisdiction. These centres also provide Specialist services. In this District, the

Community Health Centres are functioning in 1) Mulabagilu 2) Gudibande 3) Batlahalli and 4) Gownapally.

The Government has designated the General Hospitals as Community Health Centres since 1995. Regarding establishment of Community Health Centres, their growth development and functions, the details are given below.

Community Health Centre, Gudibande: In 1951 this hospital which was started as Combined Dispensary was converted into Primary Health Centre in 1966. This was upgraded to Community Health Centre in 1995 with 50 beds strength. At present provision has been made to 50 beds strength due to renovation and extension by Karnataka Health System Development Project. Eight Sub Centres are functioning under this institute.

This has facilities of Maternity Division, X-ray unit, Laboratory and Operation theatres. The Chief Medical Officer is the Administrative Medical Officer and other staffs are assisting him. Malaria, Diarrhea Diseases and Dengue fever cases that are reported in the jurisdiction of this Health Centre are being treated at this hospital. The number of Blood smears drawn, examined and no.of Malaria cases reported from 2000 to 2002 in this hospital are shown below.

Details of Cases examined during 2000-02

Year	No. of Blood Smears drawn	No. of Slides examined	No. of Malaria Positive cases
2000	17979	17979	1014
2001	11755	11755	111
2002	16527	16527	439

Table 15.16: Details of Medical Services Provided by Community Health Centre Gudibande

(in numbers)

SI.				numbers
	Particulars		YEARS	
No.		200-01	2001-02	2002-03
1	GENERAL SERVICES			
1)	OUT PATIENTS	63839	52613	63253
2)	IN PATIENTS	3223	2620	13003
3)	OBSTETRIC CARE	221	153	164
4)	SURGERIES	38	_	-
5)	TB PATIENTS TREATED		-	28
6)	LEPROSY PATIENTS TREATED	12	17	17
11	FAMILY WELFARE PROGRAMME			
1)	STERILIZATION OPERATIONS	641	638	762
2)	IUCD INSERTIONS	337	388	407
3)	ORAL PILLS USERS	165	146	145
4)	NIRODH USERS	217	184	193
III	MOTHER & CHILD HEALTH SERVICES			
1	DPT VACCINE	1049	1042	1142
2	POLIO DROPS	1049	1042	1142
3	D & T	963	1080	983
4	BCG	1107	1166	1150
5	TT (FOR PREGNANT MOTHERS)	1133	1013	1023
6	MEASLES	1014	977	1124
7	TT (FOR 10 YEARS CHILDREN)	998	1003	1130
8	TT (FOR 16 YEARS)	411	520	590

Source: Community Health Centre, Gudibande

Community Health Centre, Mulabagilu: This hospital which was started as Primary Health Unit was upgraded as Primary Health Centre in 1987 by the Government. It has its own building having strength of 50 beds. It has Out-patient section, Maternity section, X-ray unit, Laboratory and Dental Treatment Unit. Ten Sub centres are working under the control of this Centre. Seven doctors including one lady Medical Officer, one Dentist and other 100 staff members are working in this hospital. Ophthalmic care and Obstetric and Gynaecology care facilities are also available here.

Table 15.17: Medical Services given by Community
Health Centre Mulabagilu

SI.	Particulars		YEARS	
No.	Fai (iCulai S	200-01	2001-02	2002-03
1	2	3	4	5
ı	GENERAL SERVICES			
1)	OUT PATIENTS	66217	83233	68637
2)	IN PATIENTS	3560	3777	2550
3)	OBSTETRIC CARE	1576	1271	1178
4)	SURGERY (MINOR AND MAJOR)	-	-	-
5)	X-RAY AND SCREENINGS	-	-	282
6)	TB PATIENT TREATED	49	86	87
7)	LEPROSY PATIENTS TREATED	107	96	22
8)	BLOOD SMEARS DRAWN	4277	3886	3531
H	FAMILY WELFARE PROGRAMME			
1	STERILIZATION OPERATIONS	760	771	684
2	IUCD INSERTIONS	560	411	400
3	NIRODH USERS	660	600	700
4	ORAL PILLS USERS	258	143	257
III	MOTHER & CHILD HEALTH SERVICES			
1	DPT VACCINE	1836	1932	1739
2	POLIO DROPS	1836	1932	1739
3	BCG	2375	2247	2202
4	MEASLES	1644	1758	1515

SI.	Particulars		YEARS	
No.	i articulars	200-01	2001-02	2002-03
1	2	3	4	5
5	D&T	1903	2536	1915
6	TT (FOR PREGNANT MOTHERS)	2382	1861	2051
7	TT (FOR 10 YEARS CHILDREN)	1741	1730	1058
.8	TT (FOR 16 YEARS)	684	512	1098

Source: Community Health Centre, Mulabagilu.

Primary Health Centres

To provide basic health services to the rural people, Government has established Primary Health Centres in rural areas and has fullfilled their health needs. These Health centres perform several functions like Public Health care; Preventive measures to control Communicable Diseases, Family Welfare Programme, Maternal and Child Health Programmes, Control and Elimination of Communicable Diseases like Cholera, Malaria and Leprosy and conducting Universal Immunization Programme. The list of Primary Health units established in rural areas of the District during 2^{nd} and 3^{rd} five year plans are given below.

Table 15.18: Primary Health Centres and Units in the District

Year of Establishment	No.of Primary Health Centres/ Units	Places of Establishment
1955-56	1	Budikote (Bangarpet Taluk)
1956-57	3	Shidlaghatta, Malur, Gangigunte
1957-58	7	Sadali, Jangamakote, Oshettyhalli, Srinivasapura, Yaldur, Mulbagilu, Malur
1958-59	1	Bagepalli
1959-60	1	Battalahalli (Chintamani Taluk)
1960-61	3	Gudibande, Dibbur (Chikkaballapur Taluk)Koorgepalli (Srinivasapura Taluk)
1961-62	1	Vokkaleri (Kolar Taluk)
1962-63	2	Sugatur (Kolar Taluk)Kammasandra (Bangarapet Taluk)
1964-65	. 4	Kyasamballi (Bangarapet Taluk)Kaiwara (Chintamani Taluk) Nyamagondlu (Gowribidanur Taluk) Thondebhavi (Gauribidanur Taluk)

Source: District Health & Family Welfare Office, Kolar.

Every Primary Health Centre caters to the health and Medical needs of 30,000 population in given areas. In the beginning Rs. 30,000/- worth of drugs were supplied to each centre and every Primary Health Centre had one Medical officer, four Nurses, one Health visitor, one Pharmacist and a Junior Health Inspector. But at present the health activities have been increased and there is an increase of number of doctors and staff. At present every health centre has a minimum of two Doctors including one Lady Medical officer. The services available at Primary Health Centres as per Government of India pattern are: 1) Medical care 2) Control of Communicable diseases like Malaria, Cholera, Tuberculosis 3) Family Welfare 4) Maternal and Child Health Services 5) Health Education 6) School Health Services 7) Environmental Sanitation and 8) Birth and Death Registration.

The Primary Health Centres control the Primary Health Units that come under their jurisdiction. They co-ordinates in monitoring the National and State Programmes effectively. Seventy-four Primary Health Centres were functioning during 2002-03 in the district. The Taluk wise list of Primary Health Centres is given below.

- 1) Kolar Taluk: Vokkaleri, Sugatur, Chamarahalli, Kyalanoor, Holur, Vemagal, Huthur, and Urban P.H.C Kolar.
- 2) Malur Taluk: Masti, Lakkur, Tekal, Doddashivara, and Toralakki
- 3) Bangarapet Taluk: Kamasamudra, Boodhikote, Kyasamballi, Andersonpet, Doddachinnahalli, Urigampet, Bethmangala and Guttahalli
- 4) Srinivasapura Taluk: Koorgepalli, Yaldur, Somaya Jalahalli, Dalasanur, Addagal, Rayalpadu, Muttagadahalli, Mudimadagu, Puluguru kote, Hogalagere and Nambihalli
- 5) Mulbagal Taluk: Tayalur, Nangali, Devarayasamudra, Byrakur, Koladevi, Mallanayakanahalli, Kurudumale
- 6) Chintamani Taluk: Kaiwara, Murugamale, Burudu gunte, Yagavakote, Iragampalli, Chinnasandra and Kuruburu
- 7) Shidlaghatta Taluk: Melur, Sadali, Jangamakote, Basettihalli, Gangigunte, Dibburahalli, E-Thimmasandra, and Hemarlahalli

- 8) Chikkaballapur Taluk: Dibbur, Nandi, Peresandra, Nayanahalli, and Muddenahally
- 9) Gauribidanur Taluk : Namagondlu, Thondebhavi, Manchenahalli, Matadahosahalli, Hosur, Jagareddyhalli, Allipura, Idaguru, Nakkalaralli, and Alakapura
- 10) Bagepally Taluk: Cheloor, Guloor, Pathpalya, Chakavelu and Shiva pura.

As an example, the details of medical services provided by Primary Health Centres in the district. The one at Kyasamballi in Bangarapet Taluk is given below.

Primary Health Centre, Kyasamballi: The Primary Health Centre at Kyasamballi in Bangarapet Taluk started functioning Since 1963-64. It has its own building with Six beds and has Maternity section, Laboratory and Health Education wings. Sub centres located at places like Kyasambally, Kangadla halli, Keredeguru, Srinivasasandra, and Sanganahally come under the jurisdiction of this Primary Health Centre. It provides services like Ophthalmic care, Obstetrics, Gynaecology and other services. Two doctors including one lady doctor along with other 27 staff are working here. This is functioning as a referral unit to other health institutions coming under its jurisdiction. Table 15:19: Details of Medical Services Provided by Primary Health Centre, Kyasamballi (in numbers)

Si.			YEARS	
No.	Particulars	2000-2001	2001-2002	2002-2003
				till Dec.02.
1	GENERAL SERVICES			
1)	OUT PATIENTS	22544	20331	17477
2)	IN PATIENTS	68	74	69
3)	TB PATIENTS TREATED	6	5	7
4)	LEPROSY PATIENTS TREATED	8	6	4
П	FAMILY WELFARE PROGRAMME			
1)	STERILIZATION OPERATIONS	308	277	194
2)	IUCD INSERTIONS	211	184	121

SI.			YEARS	
No.	Particulars	2000-2001	2001-2002	2002-2003 till Dec.02.
3)	ORAL PILLS USERS	105	116	74
4)	NIRODH USERS	97	99	71
Ш	MOTHER & CHILD HEALTH PROGRAMME			
1)	DPT VACCINE	684	584	428
2)	POLIO DROPS	684	584	428
3)	D&T	387	348	358
4)	BCG	602	576	383
5)	TT (FOR PREGNANT MOTHERS)	635	594	513
6)	MEASLES	626	560	382
7)	TT (FOR 10 YEARS CHILDREN)	390	324	425
8)	TT (FOR 16 YEARS)	182	178	95

Source: Primary Health Centre : Kyasamballi.

Primary Health Units

During 1978, the Government re-designated all the health institutions namely Combined Dispensaries, Local Fund Dispensaries, Taluk Board and Municipal Dispensaries into Primary Health Units. These health institutions provide Medical care, caution about Communicable Diseases to rural population and monitor Public Health Programmes. These Primary Health Units provide services to a population of 15,000 – 20,000. It has the responsibility of sending health reports of its area to the concerned Primary Health Centre. Every Primary Health Unit has one Medical Officer, one Pharmacist, an ANM and Group "D" staff. Every PHU has a maternity wing. There were 34 Primary Health Units in Kolar Distric (2003 march)t and their Taluk wise details are given below.

- 1) Kolar Taluk: Dargah Mohalla, Kembodi, Madderi, Ammanallur and Annihalli.
- 2) Malur Taluk: Huladenahalli and D.N.Doddi
- 3) Srinivasapura Taluk: Laxmipura and Ronuru

- 4) **Mulbagilu Taluk :** Avani, Uttanur, Hebbani, Agaru, Alanguru, Rajendrahally, Gudipally, Kannasandra and Gokunte.
- 5) **Bagepally Taluk:** Marganukunte, Billur, Julupalya, G.Maddepally Cross, and Mittimeri.
- 6) **Gudibande Taluk :** Beechaganahalli, Hampasandra and Yallodu
- 7) **Gauribidanur Taluk :** D.N.Palya, Nagaragere, Kurudi, Ramapura, Vidurashvatha, Kallinayakanahalli and Hudaguru.
- 8) Chikkaballapur Taluk: Mandikal.

Family Welfare

In the direction of Control of Population as a first step, Family Planning Association of India was established in 1949 at Mumbai. Subsequently the Family Planning Programme throughout the country was officially started in 1952. This programme is one of the important policies of the government and has become useful to achieve country's Economic and Social Development. During second five year plan the Family Planning Programme was re-inforced and was implemented vigorously on a large scale. This Programme has an objective of improving the living standard of people by reducing the birth rate. The objective of the Government is to reduce the birth rate to 21 from 27.7 (for One Thousand Population), reduce the Infant Mortality rate from 70 to 60 and to increase the Eligible Couple Protection rate from 47.6 to 60.

According to this programme, the community is educated to have small families for happy living and to accept the family planning methods by self-motivation through Maternal & Child Health and creating healthy people by providing rural health services. Local hospitals or Health institutions not only give the family planning services, but also educating the newly married couples about contraception and the availability of services. During third five-year plan this programme was taken to the doorsteps of every household. During 1966, the Department of Family Welfare came into being. The District Health and Family Welfare Officers are having the full responsibility of Health Programmes since 1978.

He is having the responsibility of implementing effectively National and State Health Programmes through different Health and Medical institutions in the district.

The Family Planning Services is provided to the people by the Government through Primary Health Centres, Primary Health Units, Sub centres, Postpartum Centres and Urban Family Welfare Centres. Maternal and Child Health services are also included in Family Welfare Services. Mothers and Children suffering from the deficiency of Vitamins and Iron (Anaemia) are provided with necessary drugs and their health is protected. All the Government, Quasi-Government and Private health institutions in the District are participating actively in Family Welfare Programme. The Government is providing incentives and other prizes so that the community can take part actively in this Programme and provide co-operation and support to control growth of Population.

Maternal and Child Health Programme: This Programme aims at Providing Quality Health Care services to Women during their Pregnancy, Delivery and Postpartum and also to Children. Immunization services to Mothers during pregnancy and to prevent Six killer Diseases amongst Children are provided. Mothers suffering from Anaemia and vitamin "A" deficiency are also given necessary Drugs. Because of these activities the Death rates have been reduced. District Immunization Officers have been posted in the Office of the District Health and Family Welfare Officers in all Districts to monitor the immunization services. To protect Children from killer diseases like Diphtheria, Pertusis, Tetanus, Polio, Tuberculosis, and Measles, immunizations are given to them. These Services are given in Primary Health Units, Primary Health Centres, General Hospitals and other Health institutions.

Nurses are given 30 days training in PHCs and PHUs regarding these programmes. The details of the progress of the district regarding Family Welfare and Immunization Programme are given in tables 15.20 and 15.21.

Family Welfare Committees: Family Welfare Committees are functioning at District, Sub-Division and Taluk levels. These committees meet once in a month, review the progress of Family Welfare Programmes and submit the report to their higher authorities. To provide compensation to those who die during Family

Table 15.20: Progress of Family Welfare Programme in Kolar District.

S.		Sterli	Sterlization Operations	ons		INCD			Oral Pills		Nirodh No.
No.	Year	Target	Target Achievement	%	Target	Target Achievement	%	Target	Target Achievement	%	of Pieces Distributed
-	1998-1999	25893	20234	78.0	78.0 18829	18832	100.00	9400	7837	83.00	15787
7	1999-2000	27469	24706	90.00	90.00 32662	20767	64.00	10147	8112	80.00	15112
က	2000-2001	20640	24078	116.00 19112	19112	18990	99.00	7955	8109	102.00	18032
4	2001-2002	21197	22478	106.00 14853	14853	17308	116.00	7426	7711	104.00	16573
2	2002-2003	23121	23497	102.00 16478	16478	17284	105.00	9042	7643	84.00	16760

Source : District Health & Family Welfare Office, Kolar

Table 15.21: Progress of Family Welfare Programme in Kolar District

છું		_	DPT & Polio	0		BCG			Measles		TT (for	TT (for Pregnant Mothers)	(lothers)
Š	. Year	Target	Achieve-	%	Target	Target Achieve-	%	Target	Achieve-	%	Target	Achieve-	%
			ment			ment			ment			ment	
-	1998-1999	57331	56610	98.74	57331	58790	102.54	57331	52269	91.17	63038	60461	99.99
7	2 1999-2000	52452	57406	109.42	52463	62735	119.57	52463	52457	100.00 57458	57458	54100	94.15
က	3 2000-2001	52463	57907 110.37	110.37	52463	57187	109.00	52463	53709	102.37	57458	54782	95.34
4	4 2001-2002	46457	55527	119.50	46457	59540	128.16	46457	52318	112.61	52030	60195	115.69
5	2002-2003	59655	55481	93.0	59655	59496	99.73	59655	51749	86.74	62441	59493	95.27
									_				

Planning Operation, there is a committee at the District level headed by the Deputy Commissioner. The maximum compensation given to those who die during Family Planning Operation is Rs. 10,000. During 2002-03, a total amount of Rs. 1,50,000/- is given as compensation in the district.

School Health Programme: This Programme is implemented in all the Primary and Higher Primary Schools of rural areas. All school health activities, providing immunization services to School Children against Diphtheria and Tetanus and conducting health checkups and providing treatment as well as Health Education to Children are included in this Programme. During 2000-01, 2001-02 2002-03 years 1,65,450, 4,14,380 and 3,56,297 Children respectively have undergone health check ups in the district.

Medical Termination of Pregnancy (MTP): The Official orders in respect of postpartum services, Sterilization Operations, Bed strength and Medical Termination of Pregnancy Programmes, which are in force, are presently placed under Family Welfare Programme. The implementation of these programmes help in Population Stabilization and in control of fertility. The Medical Termination of Pregnancy can prevent the Unwanted Pregnancies. The institutions, which have been permitted to conduct Medical Termination of Pregnancy, are given below. The Postpartum centres are working at Kolar, Bangarapet, KGF, Chintamani, Chikkaballapur, & Devaraja Urs Medical College Kolar. Primary Health Centres namely Sugatur, Vakkaleri, Kyalanur, Kolar, Kamasamudra, Boodhikote, Andersonpet, Mulbagilu, Kyasamballi, Bethmangala, Yalur, Namagondlu, Hesur, Thondebhavi, Manchenahalli, Malur , Dibbur, Chelur, Pathpalya, Gudibande, Bejaganahalli, Vatada hosahally, Devaraya samudra, Tekal, Yaldur, Gownapalli, Rayalpodu, Addagal, Kaiwara, Batlahalli, Yagavakote, and all General Hospitals.

Pulse Polio Programme: As per the slogan of World Health Organization for the eradication of Polio by 2000 AD, the survey has been done and declared that 145 Countries are free from Polio. In view of more number of polio cases seen in India, effective steps were taken up against this disease. Accordingly "PULSE POLIO" programme was taken up in India, and under this programme all eligible children between 0-5 years are given Polio drops. All hospitals, Primary Health Centres, Health Units, Sub Centres and

other Health institutions in the district have taken part and made this Programme successful.

Table 15.22: Progress Achieved Under Pulse Polio
Programme in the District

Year and Rounds with Months	No. of Children of 0-5 years	No. of Children given Polio drops	% of Success					
Year 1995-96								
First Round 9-12-95	181390	185643	102.34					
Second Round 20-1-96	193854	196307	101.26					
Year 1996-97								
First Round 7-12-96	284621	311063	109.29					
First Round 18-1-97	290659	329522	113.37					
	Year 1997-98		,					
First Round 7-12-97	308802	323745	104.83					
Second Round 18-1-98	308802	341987	110.74					
Year 2001-2003								
First Round Dec 2001	328366	336480	102.00					
Second Round Jan 2002	328366	347313	106.00					
First Round Jan 2003	342717	341983	99.79					
Second Round Feb 2003	342717	345155	100.71					

Source: District Health & Family Welfare Office, Kolar.

IEC Activities

Table 15.23: Information, Education and Communication activities conducted (in numbers)

SI.	Activities	2000-01	2001-02	2002-03
No.				
1	Film Shows	109	118	146
2	Exhibitions	153	182	390
3	Folk Programmes	-	96	242
4	World Population day Celebration	05	05	01
5	Women's Group Discussion	43	120	-
6	Healthy Babies Shows	41	120	225
7	Women's day celebration	43	11	250
8	Mother-in-law & Daughter-in-law Meetings	43	11	-
9	Sobana Songs	-	į	225
10	Inter-personal Programmes	-	-	261
11	Wall Printings	-	-	48
12	Adolescent Educational Sessions	-	-	11
13	No. of No Scalpel Vasectomy Educational Sessions	41	_	-
14	PC & PNDT Act Educational Sessions	_	300	-

Source: District Health & Family Welfare Office, Kolar.

Integrated Child Development Scheme (ICDS): This ICDS, which was started during 1978-79 in Chikkaballapur Taluk, was later implemented in all the taluks of the District. During 2001-02, and 2002-03, this Programme has benefited 15274 and 15,463 Pregnant Mothers and 1,91,857 and 1,97,563 children respectively.

Rehydration (ORS) Programme: There are incidents of deaths of children due to dehydration because of Vomiting and Diarrhea caused by using Polluted water and Food. Under these circumstances the children should be given water solution mixed with minerals so that the Water and mineral content should not be lost from the body of children.

Oral Rehydration Solution is given as a preliminary treatment and this solution is prepared by mixing a measured quantity of salt and sugar into the boiled cooled water. The ORS packets are available free of cost in Government Hospitals and Health centres.

District Laboratory, Kolar: There is a district Laboratory functioning under the Control of Medical Officer. Four Laboratory technicians, Laboratory attenders and other staff help the Medical Officer in the Laboratory work. This District Laboratory, which has Bio-chemistry, Serology and Malaria examination sections, comes under the Administrative control of the District Health and Family Welfare Officer.

INDIAN MEDICAL ASSOCIATION

Indian Medical Association was established in 1942. It has branches throughout the country. This is a Voluntary organization of Doctors. It has Six branches in the District and has a membership of 188 (2002-03) and the membership details as per branches are given below: Kolar-10, Malur-10, Gowribidanur-22, Mulbagilu-14 and KGF-81. This Association conducts special lectures and debates for their Professional Doctors and also encourages them to participate in Public Health Programmes. It instructs all its members to co-operate in National & State Health Programmes. The association conducts free health check up camps and free specialist Medical services to the community at regular intervals.

Drug Control: Providing Standard quality drugs at controlled prices to the public is the main objective of Drug Control Department. The Drug Control Department has three sections namely 1) Administration and Implementation of Drug Laws 2) Drugs Testing Laboratory and 3) Pharmacy Education. By taking up strict control measures on the manufacture and marketing of Drugs and Cosmetics in the State, the Department is taking care of Providing Standard Quality Drugs through the implementation of Drugs & Cosmetics Act 1940 and its rules and regulations.

In order to provide standard and quality drugs to the people of this district a Drug Inspector's Office is opened in Kolar with the jurisdiction of the whole District. The main activities of this Office are to give license for the manufacture of Drugs & Cosmetics and Marketing, to caution the persons who manufacture adulterated drugs and to subject these drugs for the examination of standard quality by sending the samples for scientific analysis. The Drug

Inspector enforces the following Rules and Regulations of the act in respect of Drug control.

- 1) Drugs & Cosmetics Act 1940.
- 2) Drugs (Price control) order 1987.
- 3) Drugs and Magic Remedies (Objectionable Advertisements) Act 1954.
- 4) Pharmacy Act 1948.
- 5) Poisonous Substances Act 1919 & Karnataka Poisonous Substances Act 1966.
- 6) Drugs & Cosmetic Act and Rules related to Narcotic Drugs and Psychotropic Substances Act 1985.

Inspection staff as per rules punishes the fake drug manufacturers. During 2001-02, there were 577 licensed drug shops and qualified Pharmacy businessmen in Kolar district, with four Blood Banks functioning in the district.
