

## CHAPTER—XVI

### MEDICAL AND PUBLIC HEALTH SERVICES

#### INTRODUCTION

Ayurvedic system of medicine has been prevalent in India since the ancient period. This system was favoured by all sections of the society. It was based on the herbs. When the Muslims came to India, the Unani system of medicine was launched. It was mostly favoured by the Muslims. The *Vaids* and *Hakims* were readily available and cheap.

With the advent of the British, the above systems were somewhat affected by the allopathic system, introduced by the British in India. Exotic but based on the progressive researches in the field of medical science, it gradually carried conviction of its usefulness. Surgery was also performed under this system. The British Government opened a number of hospitals and dispensaries to provide medical facilities on an increasing scale.

On the turn of the twentieth century there were outdoor and indoor 2nd class dispensaries at Palwal and Ballabgarh while Hodal and Faridabad (old) had only outdoor dispensaries<sup>1</sup>. Ballabgarh dispensary was under the Sub-Assistant Surgeon. The dispensaries at Palwal, Hodal, Ballabgarh and Faridabad (old) were maintained by the respective municipal committees with the grants from Delhi board, if necessary. Actually, the dispensaries at Palwal and Hodal were Government charitable institutions.

There were two private hospitals at Palwal and they were maintained by the Baptist Missionary Society under the supervision of Dr. F. W. Thomas, M.D. The men's hospital had 26 beds for the patients. A new operation room was added later and in 1919, a new isolation was built by public subscription (non-Christian) and named after Sir Louis Dane, the Lieutenant-Governor who laid the foundation stone. The women's hospital was under the charge of Miss Young M.D, the nursing staff being superintended by Miss Ferguson. It had 21 beds and it received a grant of Rs. 20 per mensem from the Palwal municipality and Rs. 50 per mensem from District Board. The following

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1. *Delhi District Gazetteer* 1912, p. 213.

statement shows the work done by the *Zanana Mission Dispensary, Palwal*:—  
*Zanana Mission Dispensary, Palwal.*

## Daily Average Numbers

Indoor	1904	1905	1906	1907	1908
Male	0.84	1.00	0.50	—	—
Female	6.00	10.00	10.50	10.90	10.50
Male Children	1.88	1.00	0.70	0.50	0.20
Female Children	1.28	2.00	1.10	1.30	2.30
Total :	10.00	14.00	12.80	12.70	13.00
Outdoor					
Male	44.00	2.00	0.30	0.10	—
Female	36.00	34.00	29.90	29.70	45.00
Male Children	21.00	6.00	3.20	4.70	8.00
Female Children	15.00	17.00	13.70	13.80	24.00
Total :	116.00	59.00	47.10	48.30	77.00

The most important were operations on bones, extraction of lens and removal of vertical calculi. The statement given below shows number of operations performed at the Palwal dispensary (private added) during the period 1904 to 1908 :—

Year	Classification of operations		
	Selected	Others	Total
1904	20	130	150
1905	15	169	184
1906	29	105	134
1907	24	128	152
1908	30	152	182

The staff of the Palwal dispensary consisted of Hospital Assistant (Rs. 55); Compounder (Rs. 10); Dresser (Rs. 8); cook (Rs. 7); *Bhisti* (Rs. 7); Wardman (Rs. 7) and Sweeper (Rs. 6).

The rural dispensaries were also opened on the date shown against each :—

Name of the dispensary	Date of opening
1. Hassanpur	January 26, 1922
2. Mohana	— 1924
3. Manjhauli	February 21, 1925
4. Tigaon	March 17, 1927
5. Dhauj	July 13, 1928
6. Sohlra	September 30, 1928
7. Tappa Bilochpur	March 1, 1929
8. Aurangabad	November 28, 1929

All the hospitals and dispensaries in the Faridabad area were 2nd class, while the Mission hospitals were rated as 4th class. Mission dispensaries for males were also started at Hathin and Fatehpur Biloch in 1903. Some of these institutions, however, were short-lived. The women's hospital at Palwal was finally closed in 1932. The dispensaries at Hathin and Fatehpur Biloch were also closed in 1938<sup>1</sup>. The dispensary at Manjhauli was abolished in 1943; while the dispensary at Sohlra existed upto 1947. There is no mention of these in 1951 Census records. On the other hand, a reference about the existence of dispensaries at Jhainsa and Hathin and of a Mission Hospital for women at Palwal is found in the above Census.

The people were not entirely dependent on allopathic and other system of medicines. Whenever they suffered some sort of ailment, they resorted to some traditional methods for treatment. For example, for fever, which was most prevalent form of illness, a mixture of butter-milk with flour and water was drunk. To counteract a scorpion sting, the rural people either rubbed the spot with the root of a certain onion like plant or fried the scorpion in ghee to rub it on the sting. In other cases of snake bite, one method adopted was for the charmer to repeat an invocation to Noah in Arabic twenty one times near by a well from which he then drew water and washed his right hand, his feet and hands, and the water remaining after these ablutions was sprinkled on the patient, who also drank some of it. Scorpion-bites could be cured by invoking Khwaja Muin-ud-din. In times of great sick-

1. Gurgaon District Gazetteer (Statistical Tables), 1935, Table 53.

ness Muhammadans sometimes took a he-goat, perfect in all respects, and ten or twenty men walked with it all round the village, repeating verses of the Koran; then they killed it and buried it in the centre of the village, or they wrote a prayer on a piece of paper and put it over the chief entrance of the village. The prayer ran thus; "Son of Abdullah( son of Aimana ; flee away disease, Mohmad has come."

Some medicinal plants were also used by the people to cure the common ailment at home. *Aegle Marmelos* (*bel*) was given prepared in different ways in cases of dysentery; of *Cassia fortula* (*amaltas*), the bark, root and pulp of the long seed pods were used medicinally, the last mentioned being a strong purgative. The pulp of the seed pod of the *Tamarindus indica* (*Imli*) was used a laxative medicine and powered seeds were used in cases of rheumatism. The leaves and buds of *Grewia asiatica* (*false*) were officinal. The flower seeds and roots of *Althea rosea* (*gul khairu*) were used medicinally in cases of fever and dysentery. The bark of the *neem* was officinal and oil extracted from the leaves was used in various ways. Among medicinal plants found growing wild might be mentioned the officinal *Tephrosia purpurea* (*saephonka*) which grew in large quantity in the area; the preparation with seeds has cooling effect. *Trichosanthes dioica* (*parwal* or *prilwal*), the fruit of which before consumption was cooked and eaten. *Cotula anthemoides* (*bathua*), an oil distilled from the flowers was used in cases of rheumatism and a strong infusion of the leaves was given as an emetic. *Tinospora Cordifolia* (*gilou* or *sat-gila*); *Tragia involucrata* (*barhanta*) *cuecuta reflexa* (*amarbel*) and a large other plants too numerous to mention were used in various ways as medicine in the beginning of 20th century.

Now a days the above expounded medicinal plants are used only by the *vaids*.

The health of the people was affected enormously in 1910 by the diseases such as cholera, fever, small-pox and plague. In those days fever was the chief cause of mortality while since 1903 the second place was taken by plague.

Though the high plains of Ballabgarh and Palwal were originally very healthy but the introduction of canal irrigation disturbed the long established conditions. Many people suffered from malaria fever with enlarged spleen in the villages along the course of the Agra canal after its opening in 1874. In 1878-79. the parts of Ballabgarh and Palwal tahsils were devastated by fever. There was heavy rainfall on 1879 following a period of scarce rainfall in 1878. The adverse conditions debilitated the population owing to scarcity of food.

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1. The local names of the plants have been given in brackets; while the botanical names have been italicized.

The epidemic fever of 1908 was the severest known in the beginning of 20th century. Malarial fevers were of course the prevailing type and the mortality was highest amongst children and the aged. During the month of December, 1908, the Sanitary Commissioner of Punjab and Mr. Charters, Civil Surgeon of Gurgaon district examined all children under 10 years of age attending the schools at Palwal and found 83 per cent with enlarged spleens. The people had not yet got over the effects of the epidemic and whenever one went, people were found incapacitated for work by enormously enlarged spleens and anemia. This condition was very much marked in villages situated in low-lying tracts.

The effect on agriculture of a severe epidemic of autumn fever was always most disastrous. Both in 1879 and in 1908 harvesting of autumn crops and sowing of spring crops suffered seriously owing to the peasants being prostrated by fever.

The system of embankments which had been under construction since 1883 diminished fever in low-lying parts of the area; on the other hand the Canal Department began to make drains in the worst affected of canal irrigated areas.

The efforts were made to induce the people to adopt quinine protection and during the prevalence of the epidemic of 1908, 102 lbs. of quinine was purchased by the then District Board and put up for sale to the people at a very cheap rate (20 grains per pice) through tahsildars, *zaildars* and *lambardars*. A large quantity was also distributed gratis to the poor.

The dispensaries were largely resorted to by the people, and the stock of quinine in them was never allowed to run short. Besides this, all municipalities got in a special supply of the drugs for free distribution through members of municipal committees; the packets of quinine were sold by *hakims*, *kanungos* and *patwaris*.

In 1909, exclusive of the ample stock of quinine maintained in all dispensaries to meet the demands of the people resorting to them, the District Board purchased 55,000 grain tablets for sale to those who could afford to pay or for free distribution to the poor. To bring the drug within easy reach of the rural population, all *patwaris*, *kanungos* and District Board *moharrirs* were supplied with quinine in powder and tablet form to be sold at 3 *pies* per powder or tablet, and they were allowed a profit of 4 *annas* on each rupee worth sold, the sources of sale being notified throughout the then district. Free distribution of the drug to the poor and destitute was effected through *zaildars*, vaccination and plague staff in villages. The Baptist Mission at Palwal was given quinine for distribution amongst the villages only.

The use of quinine was also encouraged in schools and offices. There was absolute no difficulty in placing quinine within the easy reach of the people, but there certainly was the greatest difficulty in getting the majority to take the drug owing to the prejudice the people held in those days.

Plague remained most epidemic during 1903. The people suffered mostly in 1905 due to plague. The death-rate due to this mortality was 39.09 per thousand of population. The various measures to cope with the disease had been offered to the people—disinfection, inoculation, segregation, evacuation, isolation, rat destruction and treatment.

Disinfection, isolation and segregation were most unpopular and were never resorted to if, a small amount of disinfection by desiccators be excepted. The people ultimately realised the value of this measure. Thereafter inoculation had been placed within easy reach of the people but they were somewhat afraid of it. Rat destruction was carried out in all municipalities and certain villages where the people were in favour of it. This measure was gaining popularity not purely as plague preventive but as a protection to personal property.

Very few persons resorted to European treatment i.e. allopathic treatment. Pamphlets dealing with plague and its prevention were widely distributed throughout the district and all *zaildars* and large number of *lambardars* had been instructed about plague preventive measures with the order that they might help in advising the people.

Now a days, plague has been eradicated to a greater extent.

With the increase of population, the medical institutions already functioning during pre-Independence days were found inadequate. During post Independence days and particularly after the creation of Haryana as a separate State, the medical institutions were opened on a large scale by the Government. As on March 31, 1991, the medical facilities were available to the public at the following institutions in the district :—

(i) Hospitals	5	(Including E.S.I. hospital)
(it) T.B. Centre	1	
(iii) Dispensaries	3	(excluding E.S.I. dispensaries)
(iv) Community Health Centres	2	
(v) Primary Health Centres	22	

# MEDICAL AND PUBLIC HEALTH SERVICES

Besides, there were *Ayurvedic* dispensaries and 137 sub-centres in the district.

The total number of patients treated in the allopathic institutions was 10,26,296 (indoor patients—36,694 and outdoor patients 9,89,602). The total number of beds available as on 31st December, 1990 was 736 (382 for males and 354 for females). The total medical staff in the district was 1,185 (Medical Officer Class I & II-excluding teaching staff-200; Nurses/Matron: sister-in-charge—167; Mid-wives /ANMS-158; Technical Lab Assistants—28; Dispensers/Pharmacists—95; Ministerial Staff—83; *Dai/Nurse Dais*—4 and other class IV staff including sweepers—450). During 1990-91, the total number of *Ayurvedic*, Unani and Homoeopathic institutions in the district was 25 (*Ayurvedic*—23 and Unani-2). The patients treated in these institutions were 1,86,888. The total number of medical personnel in the *Ayurvedic*, Unani and Homoeopathic institutions was 50, (*Vaids/Hakims/Homoeopaths*—25 and Dispensers/Compounders—25).

During 1990-91, area covered per institution in sq. kilometre was 15 and institutions per 1 lakh population were 12 whereas beds per lakh population were 49.

The descriptive details of only hospitals functioning as on March 31, 1991 are as follows :—

**Government General Hospital, Palwal.**—The dispensary at Palwal was converted into the Civil Hospital in 1917. It is situated in the town on the old G.T. Road passing through it. Before its provincialisation in November, 1969, only one Medical Officer worked in the hospital and general medical facilities were available. Since 1969, the hospital has been functioning under the charge of a Medical Officer who is assisted by one Lady Doctor and a Dental Surgeon. There are 30 beds for indoor patients (20 for male patients and 10 for female patients). Medical facilities like maternity, gynaecology, medicine, X-ray, and dental treatment are available.

**Badshah Khan Hospital, Faridabad.**—The hospital, which was named after Abdul Ghaffar Khan, popularly known as 'Badshah Khan', the great patriot and Pakhtoon leader of the North-West Frontier Province of pre-Partitioned India, is located in Sector 4 of Faridabad township. It started functioning on June 5, 1951, under the supervision of Faridabad Development Board (Rehabilitation Department of the Government of India). The State Government provincialised it on October 1, 1959.

The hospital has been provided with 200 beds in different departments, viz. Surgical 43, Medical : 40, T.B. and Chest Diseases: 42 and Gynae-

cology : 25. The remaining 50 beds are treated as additional beds. All the facilities of a general hospital including surgery, plastic surgery, medicine, maternity, gynaecology, ophthalmology radiology, paediatrics, dentistry, eye, E.N.T. and tuberculosis treatment, have been made available here. The hospital is under the charge of a Medical Superintendent who is assisted by a team of doctors.

**Christian General Hospital, Palwal.**—The Mission hospital at Palwal was rechristened as Christian General Hospital in 1964. It is situated at the Palwal-Nuh Road and serves an area within 80 kilometres of its radius. The hospital is run with the financial help from the Baptist Union of North India.

The hospital is under the charge of a Medical Superintendent who is assisted by an Assistant doctor. It has 110 beds for indoor patients (20 for male and 90 for female patients). It provides all the facilities of a general hospital and offers treatment for all types of surgical, medical, gynaecology and mid-wifery cases. It has an operation room, laboratory, X-ray and screening plants.

A Nursing Training Centre was started in 1950. However, no new batch was taken in 1970 due to financial difficulties.

**E.S.I. Hospital, Faridabad.**—Situated to the north of Metro Cinema, Faridabad, the E.S.I. Hospital was started in 1968. Though run by the State Government, the E.S.I. Corporation of India provides funds equal to 7/8th of the annual expenditure incurred on this hospital.

The hospital is headed by a Medical Superintendent, who is assisted by 9 Medical Officers (6 Specialists and 3 General), one Nursing Sister, 11 Staff Nurses, 4 Pharmacists, 1 Radiographer, 1 Laboratory Assistant and other ministerial staff. It had a provision for 92 indoor patients (82 male and 10 female patients). An additional block with a provision for 90 beds for indoor patients had been added and formally inaugurated on March 23, 1976.

It is referral hospital and only the cases referred by the E.S.I dispensaries in the district are entertained. All usual facilities of a general hospital, viz. medical, surgical, gynaecology, eye and ear, nose, throat, T.B., X-ray and laboratory are available. Since the blood transfusion facility is not available at this hospital, serious cases are referred to Safdar Jang Hospital, New Delhi/T.B. Hospital, Kingsway Camp, New Delhi/Government Medical College Hospital, Rohtak.

**Civil Hospital, Ballabgarh.**—Located on Delhi-Mathura Highway near Ballabgarh, this hospital was built by the All India Institute of Medical



Sciences, New Delhi, and started functioning in 1967. Previously, it was a Primary Health Centre which was taken over in 1965 by the All India Institute of Medical Sciences, New Delhi, to run a comprehensive Rural Health Services Project. The object was to evolve teaching programmes for medical and para-medical personnel, service to a unit of population and to develop facilities for medical research. It was, therefore, felt to have a block hospital with all the basic facilities, with the provision of 53-beds.

The hospital is run by the All India Institute of Medical Sciences, New Delhi. The Health Directorate of Haryana contributes equivalent to the man-power and expenses of a 53-bed hospital on a set scale.

The staff of the hospital had been provided both by the Haryana Government and the All India Institute of Medical Sciences, New Delhi. The Haryana staff consisted of one Senior Medical Officer, four Medical officers, one Assistant Dental Surgeon and other technical and non-technical staff numbering 45 personnel. The All India Institute of Medical Sciences provided Resident Specialists in Medicine, Surgery, Ophthalmology, Paediatrics, Obstetrics, Gynaecology, Anaesthesiology, Preventive and Social Medicine and three faculty members including the professor of Preventive and Social Medicine in charge of the Project. The other technical and non-technical staff consisted of about 60 personnel.

Practically all the facilities of a General Hospital have been made available. Specialised medical care services are provided in Medicine, Surgery, Ophthalmology, Paediatrics, Obstetrics, Gynaecology and Dentistry. The routine laboratory investigations are conducted here for some special tests, while the specimen are sent to the All India Institute of Medical Sciences, New Delhi. Facilities for radiological investigations have been made available free of charge. A reasonably good operation theatre has been set up where in addition to the specialists posted at this hospital, faculty members from the All India Institute of Medical Sciences perform operations.

#### COMMON DISEASES

The Common diseases from which people suffer are typhoid group of fevers, tuberculosis, dysentery and diarrhoea, trachoma and chest infections (other than tuberculosis). Due to insalubrious conditions, malaria sometimes becomes epidemic. Heart ailments are also on the increase in urban areas.

Cholera, plague and small-pox are no longer epidemic in the district.

Before Independence, small-pox occurred frequently in an epidemic form. There was always a possibility of the infection being imported from the neighbouring state of U.P. Many other factors also operated adversely.

The cases were concealed by the villagers. The Hindus entertained the belief that it was a vision of goddess *mata* and Muslims considered it an act of God (*Allah ki Den*). The cases were not reported to the village officials in time.

The National Small-pox Eradication Programme supported by the World Health Organization was launched by the Government of India in April, 1962. The disease was an epidemic during 1963. Under the eradication programme, mass vaccination and revaccination was carried out during 1962 and 1963 and this resulted in suppression of the epidemic during 1964 and 1965. In 1970, there was an increase in small-pox cases. This increase in cases can be attributed to ineffective containment measures in previous years. In 1972, active surveillance and improved containment measures brought the desired results and hidden cases were unearthed and transmission was successfully interrupted.

No small-pox case has been reported after 1975. Actually, the whole of Haryana State has become free of *variola major*, the most severe form of small-pox. *Variola minor*, a less virulent type, is now the only form of small-pox that is known to exist.

Plague was also a horrible disease in the past. The factors determining its disappearance have been the spraying of houses with insecticides to kill rat, flies and systematic deratting measures. No death occurred due to plague during past many years.

Cholera is no longer endemic disease in the district with the development and expansion of public health activities relating to disinfection of water and safe drinking water-supply, pavement and drainage of streets, removal of refuse and manure heaps, ant-fly and other general sanitation measures. The severity and incidence of cholera outbreaks is becoming a story of the past. Though some cases are reported in the summer season.

**Influenza.**—Influenza is an acute infectious disease of the upper respiratory tract caused by the influenza virus. It occurred in severe epidemic form in 1918; thereafter/appeared again in 1957. Every year sporadic or isolated cases of influenza occur, sometime very serious, sometime only mild. As the symptoms are very similar to those of common cold, sometime it is labelled as influenza.

**Tuberculosis.**—It is also a major public health problem in the district. Due to the large concentration of industries in district, the incidence of T.B. is on the increase. E.C.G. vaccination campaign was launched in 1949 to protect the susceptible population in a short period. The operation were completed under the supervision of a Senior Technician and a T.B. Specialist-Medical Officer.

The National (T.B.) Control Programme was launched here in 1969. Medical facilities were provided at primary health centres. The indoor treatment was made available at Badshah Khan Hospital, Faridabad. The programme has the following objectives :—

- (i) To find as many cases as possible;
- (ti) To treat all cases in proper manner;
- (iii) To vaccinate as many of infants as possible ; and
- (iv) To bring down the incidence to a level where it ceases to be public health problem.

To create awareness among the people, a project "Expanded Programme of Health Education and Community Involvement", in Fuberculosis Control Programme for a period of three years was launched initially in the district in 1988. Under the programme, priority was given to establishment of well-equipped as well as staffed District T.B. Centre. Now the T.B. patients are being examined throughly. The details of T.B. cases as on March 31, 1991 are as follows :—

(i) Total patients	3,046
(ii) New patients	2,941
(iii) Old patients	105
(iv) No. of persons whose sputum examined, patients treated	702
(v) X-ray taken	9,600

The disease is well under control.

**Malaria.**—Malaria is one of the oldest diseases known to man which had already plagued mankind from time immemorial. During 1879, the town of Palwal which was revisited by malaria in two successive years, lost 3,900 people out of 13,500- Hathin, Bahin, Manpur and other large villages lost one-fourth of its population.

The Malaria parasite, a unicellular organism called protozoan (plasmodium) was first discovered by laveron. It was during the year 1897 when major Ronald Ross, while working in India discovered that this parasite was transmitted from man to man by a female anopheline mosquito.

Recognizing the role of DDT in the control of Malaria, Government of India launched 1952-53, one of the biggest public health programmes. The programme was carried out in all the malaria endemic areas and one or two

rounds of DDT spray, depending upon the endemicity, were given. The transmission of the disease was enormously checked.

To eradicate the disease, which was a major health menace from the point of sickness, vitality and mortality, a malaria unit was set up at Gurgaon in 1955 under National Malaria Control Programme with the help and co-operation of International agencies. To start with only the highly malarious areas of Hathin and Palwal tahsils were taken up.

In 1958, National Malaria Control Programme was switched over to National Malaria Eradication Programme. It implies the reduction of parasite reservoirs in human population to such a degree that once it has been achieved, there is no danger of resumption of local transmission. All the areas, both urban and rural, previously not under Malaria Control Programme, were brought under the new programme which consisted of two stages, (i) D.D.T. spray and (ii) surveillance.

In the 1st stage, the district was taken up for intensive D.D.T. spraying during transmission season every year till the onset of 1960. In the second stage, the phase of eradication (surveillance) was also started side by side towards the end of 1960. The two stages overlapped during 1961 when the transmission of the disease was checked in the district and the D.D.T. spray was withdrawn. This marked the completion of the 1st phase of eradication. The Malaria sub unit office was started at Palwal in 1961.

The second phase, the surveillance of residual condition of malaria infection, consisted of active and passive surveillance. Under the active surveillance, the area of the district was divided into 100 sections, each section carrying a population of about 10,000 persons. The surveillance staff whose duty was to visit the houses for detection of fever cases and collection of blood smears, was recruited, trained and posted in sections. This ensured a fortnightly domiciliary visit to each family and collection of blood smears of fever cases and administration of 4-aminoquinoline tablets to suppress the disease. If the patient was found positive to malaria, he was administered radical treatment for 3 days to clear his blood from malaria parasite.

As a result of the National Malaria Eradication Programme, the incidence of the disease was considerably reduced but in the rainy season the mosquitoes breed up quickly and labourers particularly in the district can not escape themselves from this disease. In the factories, pollution and waste material cause to spread mosquitoes which sometimes create epidemic in the district.

To reduce the incidence, the following steps have been taken during 1990 and 1991 :—

	1990	1991
Blood slides obtained and examined	37,264	36,534
Positive cases	191	4

All these activities are done under the supervision of a Senior Medical Officer and Malaria Inspector.

**Gastro-enteric diseases.**—The most common infectious diseases are typhoid and enteric group of fevers, dysentery and diarrhoea. These diseases are caused due to contaminated food and water. These can be well controlled by organized preventive measures like protection and disinfection of drinking water, chlorination of drinking water and general sanitation measures taken by Health Department.

#### REGISTRATION OF BIRTHS AND DEATHS

The system of registration of births and deaths is more than century old. Before the enactment of the Registration of Births and Deaths Act, 1969 by the Government of India, the system was governed by different rules. The main objective of the Central Act was to bring uniformity in the registration system. The State Rules, viz. Haryana Registration of Births and Deaths Rules, 1972 were also framed under the provisions of this Act.

The Director General Health Services is the Chief Registrar of births and deaths under the Act. In addition to this, Assistant Inspector General of Police, Haryana and the Under Secretary, Local Government Haryana, are also additional Chief Registrars for rural and urban areas, respectively. At district level, Civil Surgeon has been appointed as the District Registrar, while District Health Officer and Superintendent of Police are appointed as the Additional District Registrars to help the District Registrar in the discharge of his duties.

The birth and death events in urban areas are registered with the Registrar who has an office in the premises of municipality. The events of rural areas are registered with the Station House Officer (S.H.O.). The village *Chowkidar* works as a messenger on behalf of the villages.

In case of the birth and death events take place in the household, the head of the household is responsible to get the events registered. The events which take place at a place other than house-hold, viz. hospital, boarding houses or places of public resorts, the person incharge of that place is responsible to get the events registered.

As per 1991 Census, the details containing rate of births and deaths are as under :—

Total-population	14,77,240
Birth rate	27.3 per thousand
Death rate	5.5 per thousand
Child mortality	33.7 per thousand

#### PREVENTIVE MEASURES TO PROMOTE PUBLIC HEALTH

The modern conception of good health lays more stress on the prevention of disease. This necessitates various kinds of measures. The younger generation at school as well as the older members of the community require health education which is perhaps the most important activity for any effective preventive measures. The importance of good health habits formed in earlier years cannot be over-emphasised. Likewise, family planning and maternity welfare require the greatest attention if the problem of over-population has to be satisfactorily dealt with. It is equally necessary to take suitable measures to prevent adulteration of food, promote desirable knowledge and practice of nutritive food, make supply of safe drinking water possible for even those living in rural areas and to take all other such steps as will improve environmental hygiene.

**General standard of health.**—The decrease in death-rate shows that there is a general improvement in health noticeable due to the launching of various public health programmes and better medical care. The general standard of health of the inhabitants of the district is fair. The people are generally tall, healthy and possess good physique.

From a laymen's point of view, the people of the district take sufficient protein in the form of *lassi* and fat in the form of *ghi*. But a closer analysis would show that the diet of the common man, although rich in carbohydrates, is deficient in protein and to some extent in fats and vitamins. There is more of malnutrition than under-nutrition. By and large, people are vegetarian and usually consume *chapatis* or rice with *dals*, and vegetables. Only a small section of them take body building protein (meat, eggs, fish and milk) and other protective foods as (green leafy vegetables, salad, fresh fruit, etc.) but they too do not seem to be regular in their food habits and rarely conscious about the need for a balanced and nutritive diet. The large-

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1. National Malaria Eradication Programme, National Smallpox Eradication Programme, Trachoma Eradication Programme, School Health Programme, Population Explosion Programme (Family Planning), Community Development Programme, etc. have been taken up.

sized families, especially among the poorer classes, suffer both from under-nourishment and mal-nutrition. The family planning services have still to make an effective impact on family budget and nutrition.

**Family Planning and its welfare.**—The problem of increasing population in the district is similar to that of other areas of the state. To control the population explosion, the Government concentrated its efforts on the programme of family planning, which is known as family welfare since 1966-67 although it had been introduced in the district in 1957-58 with the opening of Family Welfare Colonies at Aurangabad and Ballabgarh. During 1972, following institutions were rendering family welfare assistance to the people :—

<i>Place where situated</i> (1)	<i>Name of the Institution</i> (2)
1. Faridabad	Urban Family Planning Unit
2. Palwal	—do—
3. Ballabgarh	Rural Family Planuing Centte
4. Kheri-Kalan	—do—
5. Dudola	—do—
6. Aurangabad	—do—
7. Hassanpur	—do—
8. Hodal	Red Cross Family Planning Welfare Centre

During 1989-90, family welfare programme was carried out in the district as an integral part of total Health Care Delivery System. Motivation under this programme was carried out purely on voluntary basis without any element of coercion, with active involvement of voluntary organizations and non-government agencies. To create awareness about the message of small family norm, various media activities were organized to educate, persuade and motivate the eligible couples. Orientation Training Camps of opinion leaders were held at sub-centres and PHC levels in the rural areas.

As a result of these concerted and co-ordinated efforts, 14,719 sterilization operations (158 vasectomies, 6,050 tubectomies and IUCD insertions) were performed as on March 31, 1991. During 1990-91, there were 2,38,110 eligible couples; percentage of eligible couples covered by sterilization 25.2; IUD-insertion 8.9; conventional contraceptives 9.6; oral pills 1.1 and percentage of couples protected by all methods—44.8. Nirodh users were 45,607. There were 11 family welfare clinics in the district; 5 in rural areas and 6 in urban areas.

The family welfare programmes are launched vigorously and people are motivated through various efforts. Their details are as under :—

**Post Partum Programme.**—The objective of this programme is to maximise the extent of effective contraception amongst the target population in the community visiting the hospitals by motivating primarily the obstetric and abortion cases and secondly other types of patients. The entire programme is administered by the Department of Family Welfare, Ministry of Health and Family Welfare, Government of India, in collaboration with the State Family Welfare Bureau.

**Mass Media and Extension Activities.**—During the year 1990-91, the stress had been on extension approach through involvement of other departments, agencies and voluntary organisations, including youth and women clubs and panchayats in the Health and Family Welfare motivation campaigns.

A favourable climate about family planning has been created largely as a result of mass education and extension education activities. An intensive approach through peripheral workers by organising home visit and to accelerate inter-personal communication and group discussion with the active co-ordination and participation of local opinion leaders, official and non-official functionaries and voluntary organisations has been adopted. During the year 1990-91, emphasis was laid to convince eligible couples for the adoption of small family norm, spacing and care of the mother and child by focusing their attention on their socio-economic betterment with special emphasis on availing health services for the mother and child. The improvement in the quality of life, problem of early pregnancy, early age of marriage of daughter, over emphasis on the male child, etc. were tackled through an intensive extension education supported by visual aids.

**Involvement of Voluntary Agencies.**—There has been a greater involvement of political and voluntary agencies in the promotional drive for the programme. Rotary Club and Lions Club have come forward to educate the motivated beneficiaries of services. Family Planning Association of India & Red Cross are also contributing in fulfilment of the targets.

**Education Project.**—Population education projects for adult education run by State Resource Centre of the State Education Department have been periodically monitored. There is a close co-ordination with the State education authorities for the preparation of material like work books and guide books. The department has been taking part in workshops, seminars and training programmes organised by the State Resource Centre.



**Special Campaigns.**—Motivational campaigns were launched in the State for the promotion of family welfare and immunisation programmes with the help of media agencies, Ministry of Information & Broadcasting, Government of India and State Public Relations Department. Song & drama programmes were sponsored through Song and Drama Division, Government of India in the district for giving health education. Governor of Haryana and Chief Minister, Haryana, on immunisation message posters carrying appeals from them were got printed from the departmental offset press for wide distribution in the State.

**Orientation Training Camps.**—During the year orientation training camps were organised to dispel doubts and fears lurking in the minds of the people in the rural areas of the State. As a result, the people are now adopting a small family there.

In addition to this, orientation training camps were also organised to improve the communication skills of the functionaries of other departments like social welfare I.C.D.S., Panchayats, Co-operation and Education. Adult education not only helped in building up credibility for the family welfare and immunisation programmes but also helped in better understanding of the various aspects of the family welfare programmes, responsible parent-hood, late marriage, selection of family planning cases from younger age-group, timely immunisation and safe delivery.

**Baby Shows.**—The programme of Baby Shows at C.H.Cs and P.H.Cs proved very successful in creating health consciousness amongst the women especially about M.C.H. and immunisation programmes.

**Debates/Quiz Programmes.**—In order to bring in fold the major chunk of the population which enter into the reproductive age every year, debates and quiz programmes were organised on population dynamics in schools with the help of Education Department. A book on quiz programme explaining questions and answers on health subjects was got printed and distributed.

**Monthly Magazine.**—The Directorate has started bringing out, Family Magazine 'SWASTH SANSAR', which was released on 15-5-90 and it helps in giving health education to the rural masses. The magazine is being mailed out to panchayats, Mahila-Mandals, teachers, besides other social organisations.

Media and extension activities organised with the co-operation of other departments and agencies went a long way in educating the community to accept Family Welfare, M.C.H., and Immunization services. Efforts are

still being made to enlist the help of more non-official agencies, particularly voluntary agencies in the motivation programme so that community accepts the small family norm as a way of life.

**Maternity and Child Health.**—Maternal mortality was high before Independence. There was also the question of long lasting health of many of those who survived. The organization of satisfactory maternity services, therefore, demanded attention. During recent years, much progress has been made in the expansion of maternity and child health services with the result that maternal mortality has been considerably reduced.

The hospitals and primary health centres also provide maternity and health services. The District Red Cross Society is running two maternity and Child Welfare Centres at Palwal and Hcdal.

The basic H.C.H. Services, which include antenatal, natal and post-natal care, improved both quantitatively and qualitatively during the year. Health staff pay home visits to the pregnant women. The babies in the age of 0—1 and expectant women are injected to contain the various diseases.

Under the Prophylactic scheme for prevention of anaemia in women and children, iron and folic acid (large) tablets are distributed. Prophylactic distribution of vitamin 'A' solution is given to children under the age of 5 years for prevention of visual impairment and night blindness due to nutritional deficiencies.

**Immunization Programme.**—The Universal Immunization Programme envisages coverage of all infants (children below one year of age) with D.P.T., polio, measles and B.C.G. and all pregnant women with tetanus toxoid. This scheme was introduced in 1988-89. During 1990-91, an action plan *Jivon Yojna* was launched to contain 6 epidemic diseases. The injections are administered daily in all the hospitals. Besides, the *Bal Melas* and camps are organized. To check polio, samples are also obtained. The progress as on March 31, 1991 is as under :—

Kind of activities	Target during 1990-91	Achievements	Percentage
1. D.P.T.	33,559	41,461	123.5
2. Polio	33,559	41,334	123.1
3. B.C.G.	33,559	45,105	134.1
4. Measles	33,559	33,085	98.5

1	2	3	4	5
5.	T.T. (10 years)	25,715	23,643	91.8
6.	T.T. (16 years)	23,583	16,350	69.3
7.	D.T.	27,950	27,441	98.1
8.	T.T. (Mother)	36,169	33,825	93.5
9.	Nutritional Iron to mothers	28,935	30,490	136.40
10.	Nutritional Iron to children	53,285	44,906	84.2
11.	Solution of Vitamin 'A'	43,557	42,356	97.2

Consistent efforts were made to improve surveillance of six vaccine preventable diseases with the view have a realistic idea about the incidence, so that necessary changes in programme implementation may be included to achieve the desired goal.

**Primary Health Centres.**—These institutions cater to the medical needs of common people—mostly of rural folk. The staff in these centres attend to all the work connected with both preventive and curative sides. The staff at primary health centre generally consist of one Medical Officer, one Pharmacist, One Lady Health Visitor and one Sanitary Inspector supported by other staff. Previously, emphasis had been on the treatment in hospitals but now these centres take care of preventive and curative programmes which include treatment of outdoor and indoor cases, maternity and child health work, family planning work, environmental sanitation, nutrition-school health services—immunization programmes and water-supply

The primary health centres are UNICEF aided and have been provided with UNICEF jeeps, refrigerators and other equipment including certain drugs and vitamins. UNICEF executes its milk feeding programme through these centres and sub-centres.

**Nutrition.**—The primary health centres/units deal with the oral nutrition programme particularly in maternity and child welfare centres by organising milk feeding programmes providing vitamins A and D capsules, iron and multi-vitamins tablets and B-Complex tablets received from the UNICEF. They also help in providing nutrients and medicines under school health service to the needy school children through the Education Department and the Red Cross Society. With the assistance of the Government of India and UNICEF, the applied nutrition programme is being carried out in Ballabgarh block of the

district. It aims at educating people in taking a balanced and nutritive diet from the available food items. For this, pamphlets and literature on nutrition are distributed. The demonstrations are arranged on proper cooking and emphasis is laid on food hygiene, consumption of general vegetables and cheap proteins.

Nutrition is a combination of processes by which the organism receives and utilizes the materials necessary for the maintenance of its functions and for the growth and renewal of its components.

Hospitals and institutional dietetics were carried out at B.K. Hospital and E.S.I. Hospital, Faridabad. Lectures, talks and discussions etc. were held at Faridabad. The various topics covered are balanced diet for pregnant women, diet for a lactating woman, breast feeding, weaning diet and diet given to infants, children during illness, balanced diet for adolescent, adult male and female, proper cooking methods, safe hygienic handling of food stuff, cheap substitute of expensive food stuff how to check and remove common food adulteration at home.

**Prevention of Food Adulteration.**—The question of adulteration in food has become very acute. All articles of food in the market are liable to be adulterated in the age of competition. Because of adulteration of food, rich and poor alike have affected in health. The addition of water in milk- cheaper edible oils to more expensive ones, dust or wood in *amchur* or turmeric powder, addition of non-permitted colours in sweets and cordials, white oils to edible oils, lead chromate to substances that are passed off turmeric are glaring examples. It also involves the removal of cream from milk or removal of essential oils from spices like cardamom, cloves and cinnamon. Sometimes *papita* seeds or *imli* seeds are used as adulterants in coffee.

The prevention of Food Adulteration Act, 1954 is designed to prevent adulteration as well as to the sub-standard foods. Adulteration is thus an offence punishable under this Act. It has set standards to which various articles of food must conform and has laid down rules for preservations, permitted colouring matter and prohibition of pigment of coal tar dyes.

The act also regulates, to some extent, consumer-supplier relations and consumers demand enforcement of discipline among the producers or manufacturers of food to ensure safety in the realm of foodstuffs. The consumer's legitimate ignorance and his almost total dependence on the fairness and competency of those who supply his needs have made him a ready target for exploitation. The Act intends to protect him against

outright frauds. The offence and punishment are the same whether the adulteration is more or less.

For effective implementation of the Act in Haryana, the Director General, Health Services, is vested with the powers of State Food (Health) authority and is overall responsible for implementation of programmes in the state. At the district level the Civil Surgeon and the District Health Officer have been appointed as Local Health Authorities. In addition to this- Food Inspectors, Senior Sanitary Inspectors and Tahsil Sanitary Inspectors have been declared Food Inspectors for taking food samples in respective jurisdiction.

These Food Inspectors seize the samples of various food commodities and send the sealed packets with memorandum Form VII to the Food Laboratory, Karnal immediately but not later than the succeeding working day. The district of Faridabad falls in the purview of Food Laboratory, Karnal for such purposes. If the sample is found adulterated, prosecution is launched against the defaulter immediately.

The District Advisory Committee comprising representatives from Government, industry, consumer, retailers, whole-salers, manufactures, etc. hold meeting at district headquarters.

The work done in the field of prevention of food adulteration during 1991 compared with the performance in the preceding year-1990 is as under :

Samples	Number	
	1990	1991
1. Samples of various food articles seized	707	653
2. Samples found adulterated	85	69
3. Cases launched for prosecution	85	69
4. Prosecution decided	10	14
(a) Ended with conviction	6	6
(b) Ended with acquittal	4	8
5. Fine imposed by the courts	In each case a fine of Rs. 6,200 or 6-month imprisonment was imposed.	

**School Health Programme.**—The School Health Programme aims basically to provide medical examination of school children to identify deviations from normal health and to provide treatment for minor ailments on the spot and to provide referral services to the sick children where specialist consultation and investigations are required. Besides the control of communicable diseases through immunizations, provision of healthful school living conditions also formulates an aspect of the programme. Under this programme, 3 days training is given to school teachers in basic aspects, so as to enable the primary school teachers to actively associate themselves in planning and carrying out the school health programme with the ultimate goal of achieving better health for all children.

The Intensive School Health Programme has been going in the district since 1989. The 1st workshop was held at Surajkund during 14th February to February 17, 1989. Keeping in view the principle that "healthy children ensure a healthy nation", the medical officers also render advice to the heads of the institutions regarding proper sanitation, construction of hygienic latrines and urinals and provision for safe drinking water-supply. The achievements under this programme for two years (1990 and 1991) are as under :—

	1990		1991	
	Targets	Achievements	Targets	Achievements
1. Total schools	566	411	566	480
2. Students examined	1,12,782	73,053	1,12,782	85,750
3. Found with ailments	—	8,695	—	8,628
4. Students referred for specialist services	—	1,990	—	1,614
5. Teachers were imparted training	—	2,156	—	2,156

**Prevention of blindness.**—The Haryana State is facing a colossal problem of eye morbidity and visual defects including a total loss of vision which is imposing serious constraints in social and economic development. To deal with the problem the National Programme for the control of blindness has been in operation in the district since April,

1981. To achieve this aim, the programme is providing immediate relief to the needy by camp approach and by establishing permanent eye care facilities with graded expertise at different levels coupled with health education measures.

The achievements under this programme during 1990-91 are as under :—

1. Number of eye cases examined	61,719
2. Number of eye camps held	18
3. Number of operations performed	
(a) Intra-ocular	3,027
(b) Extra-ocular	272
4. Number of cases in which error detected	9,783
5. Number of persons prescribed glasses	8,605

**Leprosy Eradication Programme.**—Leprosy has low endemicity in Haryana state. Earlier most of the leprosy patients were migratory from southern states that had come to settle in leper colonies. But now indigenous cases have been reported.

The leper colony at Faridabad is under the protection of *Hind Kusht Niwaran Sangh* which is voluntary organization. The Social Welfare Department, Haryana is issuing grant-in-aid to the above *Sangh* for free board and lodging and rehabilitation of leper inmates. In addition, medical officers of Health Department are regularly visiting the colony once a week. The leprosy patients of this district were brought under multi-drug therapy (M.D.T) in 1989, whereby the patients get cured within 6 months to 2 years in comparison to 7 to 10 years' treatment.

To augment the survey operations, an essential component of the programme, a Sample Survey-cum-Assessment Unit has been established at State head-quarters with the objective of assessing the quality of data-generated by the district leprosy services, evaluating the effectiveness of treatment including M.D.T. at periodic levels and estimating the magnitude of leprosy in terms of prevalence and incidence. The Urban Leprosy Centre is also at Faridabad.

During 1990-91, 813 leprosy patients were reported and out of them, 2 patients were fully cured. To rehabilitate leprosy patients and to

bring them in main-stream, re-constructive surgery facilities are also available at Medical College, Rohtak. Voluntary organization, such as Red Cross also helps the lepers suffering from deformities. The generous people come to leprosy colony and donate liberally in favour of leprosy patients.

**Oral Rehydration Therapy Programme.**—Diarrhoeal diseases form an important cause of morbidity and mortality, especially amongst the children below 3 years of age. Death in diarrhoeal diseases is caused by acute dehydration, i.e. exorbitant loss of fluid and electrolytes. Such deaths can be prevented if the fluid and electrolytes lost from the body are replaced quickly. Oral Rehydration Therapy is an effective and safe, as the intravenous therapy, but has a distinct advantage of simplicity of administration.

Majority of cases developing dehydration can be treated with Oral Rehydration Therapy (O R T) by a standard W.H.O. formula containing glucose, sodium chloride, sodium bicarbonate or trisodium citrate dehydrate and potassium chloride (Oral Rehydration salt) dissolved in clean potable water. Hardly 1% of cases suffering from severe dehydration will require hospitalisation and intravenous fluid therapy.

With these facts in view, a National Programme for promotion of ORT to prevent diarrhoeal deaths, especially in children due to dehydration, has been formulated. Taking a district as the unit for implementation, the programme has been extended in a phased manner in Haryana. This programme was extended to this district in 1988-89.

The programme includes the following components :—

- (i) Health education of masses for popularising the acceptance and use of O.R.T. ;
- (ii) Purchase and supply of oral rehydration powder; and
- (iii) Training of medical and para-medical staff and educating the mothers about preparation and use of oral rehydration powder.

#### **National Goitre Control Programme**

Goitre Control Programme has been in the operation in the State since 1962. Surveys showed that there was endemicity in the whole of the State, so a notification was issued in December, 1987 banning the sale of non-iodised salt all over the State.

The Department has issued instructions that Food Inspectors should take at least one sample of salt per month to ensure the sale



of iodised salt. The Civil Surgeon was asked to ensure that Food Inspectors achieve the targets set before them.

### **S.T.D. Control Programme**

The Sexually Transmitted Diseases (STD) are generally prevalent in the Faridabad town which is the hub of industries. In view of this, S.T.D. clinic is functioning at Faridabad. Due to efforts of medical and health staff, this disease is under check.

### **AIDS Detection**

AIDS is caused by a virus HIV and it is transmissible from one person to another through unsafe sexual relations. As the disease spreads, it is included in communicable diseases. There is no known remedy or treatment, therefore the AIDS Control Programme envisages early detection of suspected carriers and potential patients. It is widely identified with immunological test known as Elisa Test. The Elisa Positive cases are followed up for development of signs/symptoms of AIDS. The AIDS patients are segregated so that others may not get infected and they are helped as much as humanly possible.

The group at risk where the samples to be collected are :—

- (a) Known sexually permissive segments of society, i.e. vigilance homes, jails and remand homes;
- (b) People attending S.T.D. Clinic;
- (c) OPD/Indoor cases admitted as Immuno-deficiency syndrome, especially with history of sexual promiscuity;
- (d) Professional blood donors; and
- (e) Foreign students seeking admission to educational institutions.

### **Drug De-Addiction Programme**

Drug abuse is the use of drug for any purpose other than medicine. Drug addiction is physical or mental dependence of a person on such drugs. This is a world-wide menace leading to ill-health, besides producing individuals with criminal bent of mind like stealing, murder, sex-exploitation and making a lie. Drug trafficking is a heinous crime with international network and ramifications.

The programme includes the prevention of drug abuse and addiction. For the preventive side, besides the law and enforcing agencies, the Health Department keeps a watch on its sale. There is a Drug

Inspector in the district who checks and prevents the sale of intoxicating and psychotropic drugs. Commonly addiction forming drugs used are cannabis, opiates, benzodiazepams, barbiturates and hypnotics. The most vulnerable section of population is the youth of lower and lower middle class. Some students are fond of these drugs.

This district is very close to national capital and labour section is in majority. Red Cross Society, Haryana is running a Drugs De-Addiction Centre at Faridabad. Qualified psychiatrists, sociologists and other trained personnel visit this centre. Further, patients are helped in the hospitals.

Under the individual patient monitoring system, the details of patients about behaviours and circumstances under which he became addict are recorded. Ways and means found to improve him are also noted. These are preserved for future monitoring/counselling and social reference.

### Dental Health Care

Oral health is an integral part of general health, rather oral cavity can rightly be called as gateway to the general health. The dental disease particularly dental cavities and dental diseases have shown a marked increase in the district. To combat these problems, there is a great need to launch an effective Community Dental Health Care Programme, emphasizing prevention, intraception and control of various dental diseases. Keeping in view, the Health Department is determined to provide maximum dental health care to the people.

There are two Senior Dental Surgeons (Class-I); each in General hospital and ESI hospital, Faridabad to render specialised dental health care to the public.

### WATER-SUPPLY

Formerly, people depended on artificial or natural ponds, streams, hand-pumps, and open wells for their daily requirements of water. They dissipated much time and energy thus wasted could otherwise be better utilized in more production and useful pursuits. The unprotected water supply, being susceptible to contamination, was a big health hazard due to water-borne diseases. The only solution to this acute problem was to ensure tapped water supply for drinking purposes.

Concrete steps in this direction were taken after the formation of Haryana state in 1966 and since then a number of percolation wells

and tubewells were constructed at various places in the district for supplying tap water to the people both in rural and urban areas. A number of clean water tanks and overhead service reservoirs have been constructed for the supply of potable water after proper-treatment.

There is tapped water supply in all the towns of the district. It is a matter of dismay that by the end of March 31, 1991, all the villages of the district were provided with safe drinking water.

### SEWERAGE SYSTEM

In Ballabgarh, new Faridabad area and Palwal towns, the sewerage facilities existed as on March 31, 1991. The skelton sewerage facilities are available in other towns. The people of rural areas go to fields to attend to their natural call.

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