

## CHAPTER XVI

### MEDICAL AND PUBLIC HEALTH SERVICES

#### **Historical Background**

In ancient times, people of the district generally enjoyed good health. According to Bana Bhat, court poet of Harsha, people of Kurukshetra were healthy in body and mind and suffered no disease, epidemic and premature death.<sup>1</sup> As elsewhere in the country, Ayurvedic system of medicines remained prevalent in the district till foreign invaders started making onslaught in the district. They brought Unani system which, with the passage of time, also became popular. Ayurvedic and Unani systems continued to exist side by side till the advent of the British. Hindus mainly patronized the Ayurvedic system and the Muslims favored the Unani system. Medical treatment was mostly provided by two classes of Physicians-*Vaidyas* were in the first category and generally inherited their profession. Secondly, there were *Haqims* and in their case also profession generally passed down from father to son. The common man of the district as such was dependent upon the traditional and household remedies handed down from generation to generation. Faith in deities had a great hold on the people, who invariably invoked their intervention in times of sickness, epidemics and distress.

With the introduction of Allopathic system of medicines by Britishers in the 19<sup>th</sup> century, the Ayurvedic and Unani system started gradually receding into background. Though even after introduction of Allopathic system the indigenous system continued to be in practice but being based on progressive research. In the field of medical science, Allopathic system became popular with the passage of time. People particularly in rural areas initially had certain prejudices against the system. But with the spread of education, the system also became popular in rural areas.

After independence, special steps were taken to revive ancient Ayurvedic system. In order to popularise the system, measures have been taken to promote research in the field of Ayurveda. Government

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<sup>1</sup> H.A.Phadke, Haryana Ancient and Medieval, 1990, p.59.

has opened Ayurvedic Dispensaries in the rural areas. One Ayurvedic Medical College had also been opened in May, 1972 at Kurukshetra to promote Ayurveda. Later on, the college had been taken over by the Government of Haryana and it had 100 bed hospital. It provides BAMS degree course to 50 students and diploma in Ayurvedic Pharmacy to an equal number of students. As a result of concerted efforts made by the Government, the system is gradually regaining its popularity which has otherwise been lost by the Unani system. Of late, Homeopathic system is also gaining popularity, particularly in urban areas.

In 1883-84, there was only one Allopathic Dispensary in the areas now comprising Kurukshetra district. This was located at Thanesar.<sup>1</sup> In 1904, the number of Allopathic Dispensaries rose to four.<sup>2</sup> New dispensaries were opened at Pehowa, Shahabad, and Ladwa during 1884 to 1904. The number of dispensaries increased to six in 1935.<sup>3</sup> Two new dispensaries were opened in the district during 1912 to 1935 at Thaska Miranji and Babain.

After independence, the government chalked out various plans for extending medical and health services to the people. Medical institutions were opened on modern lines and provided with the necessary equipment and other facilities. To control and eradicate diseases, many new programmes were undertaken. Many new dispensaries were opened since then with a view to provide better medical facilities to the people.

### **Medical and Health Services**

The Medical and health services in the district are controlled and looked after by the Chief Medical Officer, Kurukshetra. He is assisted by two Deputy Chief Medical Officers, one for medical and the other for health services. In addition, a District Tuberculosis Officer, a District School Medical Officer, a District Malaria Officer and a District Family Welfare Officer work under his control. He functions directly under Director Health Services, Haryana, Chandigarh. L.N.J.P. Hospital Kurukshetra under the charge of a

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<sup>1</sup> Ambala District Gazetteer, 1883-84, Table XXXVIII.

<sup>2</sup> Karnal District Gazetteer, Statistical Tables, 1904, Table 53.

<sup>3</sup> Karnal District Gazetteer, Statistical Tables, 1935, Table-53.

Senior Medical Officer and Community Health Centres at Shahabad, Pehowa, Ladwa and Jhansa are under the charge of a Medical Officer. Each Primary Health Centre is under the charge of a Block Medical Officer who also supervises various health schemes, family welfare work, programmes for the control and eradication of AIDS, malaria, smallpox, tuberculosis, trachoma, etc. All dispensaries function under the supervision of a Medical Officer. Likewise, each Ayurvedic Dispensary is under the charge of a *Vaidya* who functions under the control of the Chief Medical Officer, Kurukshetra.

Medical service is confined to rendering medical relief to the public through Allopathic and Ayurvedic Institutions. In March, 2004, the number of allopathic institutions in the district was 21. One Civil Hospital, four Community Health Centres, one T.B. Centre, 14 Primary Health Centres, 104 Sub Health Centres and one Urban Dispensary, besides 15 Ayurvedic Dispensaries. A list of these institutions is given in Table 1 at the end of the chapter. There were also many private clinics and Registered Medical Practitioners who provided medical and health facilities to the people. A brief description of some of the important institutions is given below:-

**Lok Nayak Jai Parkash Hospital, Kurukshetra.**- Located on the Pehowa road near the first gate of the Kurukshetra University Campus, this hospital was earlier known as Referral Hospital and was started in October 1965. It had 50 beds for indoor patients with all the facilities of a General Hospital. The new building of the hospital was inaugurated on July 27, 1975 and later it was renamed as Lok Nayak Jai Parkash Hospital. The Hospital is headed by a Senior Medical Officer who is assisted by 18 doctors and 135 members of auxiliary staff.

The hospital has 100 beds-52 for males and 48 for females. It has departments of medicines, surgery, gynaecology, paediatrics, ENT (ear, nose and throat), dentistry and orthopaedics. It also provides facilities for X-ray, ECG, laparoscope and clinical laboratories.

The number of indoor and outdoor patients in 2004 were 6,771 and 84,790 respectively.

Besides, LNJP Hospital, there were four community Health Centres in the district in March 2004. These were located at Shahabad, Pehowa, Ladwa and Jhansa. Each centre covers a

population of 1,30,000 approximately. A brief description of these centres is as follows:-

**Community Health Centre, Shahabad.-** Opened as Civil Dispensary in 1901, it has 30 beds and has departments of medicines, surgery, gynecology and dentistry. It also provides facilities for X-ray and clinical laboratory. This Centre is headed by a Senior Medical Officer who is further assisted by 7 Medical Officers and other paramedical staff. The number of indoor and outdoor patients in 2004 were 4,492 and 42,537 respectively.

**Community Health Centre, Pehowa.-**It is a 30 bed hospital and has departments of medicines, surgery, gynaecology and dentistry. It also provides facilities for X-ray and clinical laboratory. This Centre is headed by a Senior Medical Officer who is assisted by 4 Medical Officers and other paramedical staff. The number of indoor and outdoor patients in 2004 were 1170 and 30,045 respectively.

**Community Health Centre, Ladwa.-**It is a 30 bed hospital and provides facilities for X-ray and clinical laboratory. Its staff includes 7 Medical Officers and 6 members of paramedical staff. The number of indoor and outdoor patients in 2004 were 2907 and 36,028 respectively.

**Community Health Centre, Jhansa.-**It has 30 beds and provides facilities for clinical laboratory. This Centre is headed by a Senior Medical Officer who is assisted by two Medical Officers and other paramedical staff. The number of indoor and outdoor patients in 2004 were 30 and 13,288 respectively.

#### **Diseases Common to the District**

The common diseases which occur in the district are gastro enteric diseases and typhoid group of fevers, tuberculosis and malaria. Epidemic diseases, viz. cholera, plague and smallpox are three noticeable diseases under the Epidemic Diseases Act, 1897. Of these, plague and smallpox are not epidemic. Cholera is epidemic but the incidence of disease depends largely for importation of infection and laxity in preventive measures to check it.

Plague and smallpox have become non-existent. Gastro enteric diseases and cholera have been effectively contained, malaria was practically eradicated but its incidence has again increased in the

recent years. Medical facilities are being expanded and provisions are being made to make available more and more specialised treatment to the people.

**Cholera.-** Cholera used to occur in this area in an epidemic form before 1947 and there was always high rate of mortality. It was occasionally imported from outside the district especially after the dispersal of gatherings at fairs and festivals of all India fame, viz. solar eclipse fair at Kurukshetra, and Pehowa fair. The number of cholera cases has decreased recently due to the strict prophylactic and other anti-cholera measures like medical inspection posts and mass inoculation in hospitals and dispensaries. But the most important measures necessary to obviate the occurrence of this disease was arranging the supply of safe and clean potable water. With the development and expansion of public health activities relating to disinfection of water, anti-fly and other general sanitation measures, the disease stands controlled.

**Plague.-** Plague was prevalent during 1902 to 1911 and took a heavy toll of life. Earlier, the attitude of the people towards anti-plague measures was apathetic and thus they had to be persuaded with great tact and effort to submit to rat destruction and inoculation. There were a few instances of actual resistance to anti-plague measures. But gradually this resistance died down. Now this disease has been completely wiped out and the district is plague free. The factors responsible for its disappearance were the spraying of houses with insecticides to kill rat fleas and systematic de-rating measures.

**Smallpox.-** One of the most contagious and killer diseases, smallpox earlier used to occur in epidemic form. As a result of various preventive measures taken by the Government, smallpox has now become non-existent. The National Smallpox Eradication Programme was launched by the government of India in April, 1962. Under this programme, mass campaign was carried out and the entire population was vaccinated during 1962-63. This programme is supervised by the Deputy Chief Medical Officer, who is assisted by the Assistant Unit Officer (Smallpox). In the rural areas, smallpox supervisors and vaccinators carry out the vaccination work under the direct supervision of the Block Medical Officers. In the urban areas, Municipalities also provides staff for vaccination work.

**Malaria.-** In the late 19<sup>th</sup> century, malaria was the most prevalent disease in Karnal district from which Kurukshetra district was carved out. Malaria fevers were the worst in those parts of the district where rice cultivation was carried on, and where there were extensive marshes; thus, the dwellers near the chain of swamps caused by the Western Yamuna Canal, and the inhabitants of the tract every year flooded by the Sarswati were the greatest sufferers.<sup>1</sup> The main contributing factor for the incidence of malaria in the district is the inundation during Monsoons and the overflowing of rivers, streams and other water channels. This leaves behind big patches of water collection here and there, which prove good breeding places for anopheles mosquitoes thus exposing the entire population of the district to the ravages of malaria.

To eradicate this disease, the Malaria Unit, Karnal established in 1953 under the National Malaria Control Programme. Thanesar Tehsil was transferred to the Malaria Unit, Ambala in 1954. This programme was renamed as the National Malaria Eradication Programme in 1958. All the areas, both urban and rural, previously not under Malaria Control Programme, were surveyed and brought under its control. The Programme consisted of two stages, i.e. DDT spray and surveillance. Under the first stage, DDT spray was done twice during the transmission season every year till 1961-62. In the second stage, every fever case or every case having a history of fever was also screened by Basic Health Workers during fortnightly house-to-house visits. The blood slides so collected were examined microscopically for detection of malaria parasites and the persons found positive for malaria were given medical treatment for five days.

For eradication of Malaria the district has been divided into 20 sectors comprising 117 sections. Each section is manned by one male and one female Multi-purpose Health Worker whereas each sector is headed by the male and female Multi-purpose Health Supervisors. The entire activities of the Programme to control malaria are carried out under the guidance of District Malaria Officer. There are 20 malaria clinics and 144 passive agencies working at various places in the district. Blood slides are collected and examined in these centres and positive cases are given treatment. Besides, 605 Drug Distribution

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<sup>1</sup> Karnal District Gazetteer 1883-84, p.10.

Centres have been opened in villages to provide immediate relief to the people. During 2004, Malathon was sprayed in the entire district which greatly helped in reducing the incidence of Malaria in the district.

Thanesar town of the district has been covered under Malaria Scheme Programme launched by Government of India. Under this Scheme, the town has been divided into 8 sectors and each sector is manned by four persons including three Field Workers and one Senior Field Worker.

The year wise number of malaria cases detected in the district during 1998 to 2004 was as under:-

<b>Year</b>	<b>Malaria cases detected</b>
1998	146
1999	8
2000	1
2001	1
2002	1
2003	2
2004	-

The above table shows that malaria has been completely eradicated from this district after 2004.

**Tuberculosis.-**T.B. is a leading killer of adults. It kills adults more than any other infectious disease. Primarily, it affects people in the most productive years.

By the end of April, 2004, Haryana was completely successful to launch all district under RNTCP i.e. entire population of 2.3 crore has been covered under RNTCP. Under this Programme more than 6000 DOTC (directly observed treatment censes) 209 microscopic centers and 46 T.B. units are functioning under this programme in the entire state. The Government is providing the free medicines and sputum microscopy facilities. Under this Programme, the DOT provide under his direct supervision gives a patient medicine at DOT

centres which is near to the patients house. Revised National Tuberculosis Central Programme was implemented in Kurukshetra in February, 2004. In 2003-04, as many as 1858 cases were registered. Procreation is explained to them so that they could continue their treatment while staying at home. Serious cases, however, are given indoor treatment in Hospitals and Primary Health Centres.

**Trachoma.-** Trachoma is a common eye disease. Trachoma Eradication Programme, a Centrally Sponsored Scheme, is functioning in the district. Children below the age of 10 years are given application with antibiotic eye ointment twice a day for 5 days in a week extending over a period of 6 months. Facilities for the treatment of this disease are provided at L.N.J.P. Hospital and Community Health Centres.

**Virus Conjectivitis.-** Noticed during 1986-87 and now popularly known as “Eye Flu”, it spreads in an epidemic from during September-October when humidity level goes high after rainy season. The disease is highly contagious and one can be affected even by sake of hands and in coming with direct contact of eyes of an ailing person. The eyes become hot red and cause lot of irritation and swelling. The ailment disappears within 5-6 days and the patient is advised to remain isolated, not to rub eyes not to use anybody’s towel, handkerchief etc. and wash the eyes with fresh cold water 5-6 times a day. A few educated and health-caring patients visit Govt. Hospitals and private eye specialists who generally prescribe. Norflox, gentamycine, soframycine eye drops to be applied well four times a day. There can be no specific number of the patients as it depends upon spreading of the disease in public places at different intervals. As a preventive measure, people are advised to wear dark black goggles and not to come in direct eye contact or shake hands with the persons already affected. In most careless cases, the diseased cases slight blindness and persistent irritation.

**Leprosy.-** Local population is free from leprosy. However, lepers (beggars) visit Kurukshetra at the time of fairs and create public health problems in the district. In order to provide medical treatment to these patients and to check the spread of leprosy, a Programme of Leprosy Eradication and Control has been taken up the Hind Kusht Niwaran



Sangh, Haryana State Branch, Chandigarh. During the year 2000-01 to 2003-04, the following cases have been found in Kurukshetra:-

Year	No. of cases at the beginning of the year	Cases detected during the year	Cases discharged	Cases at the end of the year		
				Male	Female	Total
2000-01	68	167	132	79	24	103
2001-02	103	83	114	54	18	72
2002-03	72	47	71	-	-	48
2003-04	48	44	50	-	-	42

To provide health services for leprosy patients, a leprosy clinic is being run at Kurukshetra where patients are examined on every Thursday and various tests are carried out.

**AIDS (Acquired Immune Deficiency Syndrome).**- AIDS is a killer disease worldwide to which no treatment has yet been found and it is engulfing more and more people day by day, which can be combated only by taking preventive measures and by educating the people through mass awareness programmes, e.g:-

- I. Haryana AIDS Control Society is carrying out IEC activities in District Kurukshetra since the inception of AIDS Programme in 1992. These include Advertisements in newspapers, Radio, Cable TV, corner and street plays.
- II. At district hospital a VCTC (Voluntary Counselling and Testing Centre) was established to offer counselling and testing facilities for HIV.
- III. APPTCT Centre (Prevention of Parent to Child Transmission) have been established at the Gynae Centre or the District Hospital for free counselling and HIV testing of pregnant woman. In the VCTCs and PPCT centres, 2140 patients were given counselling for HIV so far. 1931 were tested for HIV and 6 tested as HIV +ive.
- IV. S.T.D. (Sexually Transmitted Disease) clinics have been established in the district hospital for giving free treatment, condoms and counselling to STD patients.

- V. Blood Bank District Hospital in Kurukshetra has a licenced blood bank. In this blood bank, every unit of blood is screened and five mandatory test are done (HIV, Hepatitis-B, Hepatitis-C, VDRL and syphilis).

In addition to it, various voluntary organisations educated people to take preventive measures and spread AIDS awareness messages through sign boards at prominent places and arranging various talks and lectures in schools/colleges and other educational institutions. Even some of the private transport vehicles carry AIDS awareness message behind the back and the sides of their vehicles.

**Gastro-Enteric Diseases.-** The most common infections are typhoid and enteric group of fevers dysentery and diarrhea diseases are well under control as a result of organized preventive measures like protection and disinfection of drinking water, wells, chlorination of drinking water and general sanitation measures taken by the public health staff.

**Vital Statistics.-** Statistics about births and deaths are the most important for planning and working of health programmes. In towns, the Municipalities keep the relevant record and in villages, *chowkidars* report the day-to-day statistics at the police station of their area. After compilation, the statistics are passed on by the Station House Officer to the Chief Medical Officer.

The satisfactory results achieve by the Health Department are reflected in reduced incidence of disease, lower mortality-both infant and adult. The following table showing birth and death rate and the infant mortality from 2000 to 2004 illustrate this position:-

<b>Rural</b>	<b>2000</b>	<b>2000-01</b>	<b>2001-02</b>	<b>2002-03</b>	<b>2003-04</b>
Birth rate per thousand of population	22.50	22.87	23.57	20.16	21.97
Death rate per thousand of population	5.42	5.32	5.23	4.96	5.25
Infant Mortality rate (under 1 year of age) per thousand of live births.	32.10	31.56	30.92	31.05	32.66

**Urban**

Birth rate per thousand of population.	21.98	21.15	21.05	25.31	21.02
Death rate per thousand of population.	5.12	5.05	4.80	5.65	4.69
Infant Mortality rate under 1 year of age) per thousand of live births	24.24	24.85	24.79	26.29	26.29

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**Preventive Measures to promote Public Health**

The modern concept of good health lays greater emphasis on prevention of diseases and this necessitates various kind of measures. The younger generation must be given health education which is perhaps the most important activity for any effective preventive measure. Health education is equally necessary for older persons. Likewise, family welfare and maternity welfare required greatest attention if the problem of over-population has to be solved. It is equally necessary to take suitable measures to prevent adulteration of food, promote desirable knowledge and the practice of nutritive articles of food even for those living in rural areas and to take other such steps as well to improve environmental hygiene.

**School Health Service.**-The first school health clinic in the district was started in 1981. In 1983, school health service was made an integral part of all Hospitals, Primary Health Centres and Rural Dispensaries. The District School Medical Officer looks after the school health services in the district. He renders advice to heads of schools in health matters, viz. appointment of Medical Officers and Pharmacists for schools and for proper sanitation arrangements.

School children studying in classes I to VI and IX are thoroughly checked and arrangements are made for the treatments of those found ill. The following figures show the school health work done in the district since 1996 to 2004 :--

Year	Children examined	Affected children	Follow up children	Health Talk	Teachers Trained <sup>1</sup>
1996-97	1,06,753	32,784	32,325	1,587	1,151
1997-98	1,10,019	11,240	10,475	988	524
1998-99	1,15,981	14,988	13,776	6,505	125
1999-00	1,07,694	8,639	9,790	852	477
2000-01	1,12,510	12,924	4,993	885	786
2001-02	91,337	10,252	5,064	797	691
2002-03	85,499	13,272	4,340	694	1,062
2003-04	64,163	20,253	3,624	557	1,146
2004-05	87,471	20,134	10,192	794	434

**Health Education.-** Health education aims at providing integrated curative and preventive service for better health of the citizens.

Health education is the responsibility of all medical and paramedical personnel. It is mainly carried out through the staff of the Health Centres. It is generally imparted by means of lectures, film shows, leaflets, posters, radio, advertisements and newspapers. Interviews and group discussions are also arranged to create health consciousness among the people.

**Family Welfare.-** The Family Welfare Programme which has now acquired significance, was not considered so important in this area in the past. The masses in general were illiterate, orthodox and backward. As elsewhere, they believed that children were the gift of God, so the result was large families both in rural and urban areas.

The problem of increasing population in the Kurukshetra district is similar to that of other areas of the State. Family Welfare Programme earlier known as Family Planning Programme was

<sup>1</sup> Teachers are given training for handling medical tests. Block Medical Officers are responsible for such training.

launched in the areas comprising Kurukshetra district in 1957-58 to control explosion in population.

Under this Programme, a three dimensional approach of education has been formulated, viz, the mass approach, the group approach and the individual approach for creating awareness among the people and building opinion against population explosion and in favour of small family. The group approach is carried out through group meetings, debates, group lectures and seminars. It is the individual approach which ultimately leads to motivation of cases. Under this approach, efforts are made to convince the couples in the child bearing age-group to adopt family planning methods. The efforts of local leaders, social workers and also those who adopt family planning methods are utilized in motivating the people.

All activities of Family Welfare Programme in the district are carried out under the guidance and supervision of the Chief Medical Officers. District Family Welfare Officer is actually responsible for this Programme. At the block level, a rural family welfare unit is attached with each Primary Health Centre and is under the charge of a Medical Officer. He is assisted by Extension Educator, Multipurpose Health Workers, Lady Health Visitors, Auxiliary Nurse Midwives and trained *Dais*.

The Haryana branch of Family Planning Association of India runs a family planning centre in Kurukshetra University, Kurukshetra. The function of the centre is only educative.

The family planning practices cover methods for limitation of families and also for spacing of children. The former includes sterilization of males and females and the insertion of I.U.C.D. (Intra Uterine Contraceptive Device), popularly known as the 'Loop'. The latter includes the use of condoms, diaphragm, Jellies, foam tablets and oral pills. Among the conventional contraceptive 'Nirodh' is distributed through Hospitals, depot holders, grocer's shop mini banks, post offices, malaria drug distribution centres and health guides.

In the beginning of this Programme, people in the district often chose vasectomy as a permanent family welfare device. In 1981-82, laparoscopic tubectomy was introduced in the district and it has

become a major family planning device. Besides free medical and surgical services, transport and diet are arranged for sterilization cases. Cash incentives area also given.

The Family Welfare Programme in the district has made considerable progress. The following data shows the progress of family welfare work in the district from 1995-96 to 2003-04:-

Year	Conventional contraceptives distributed (Pieces)	Sterilization cases	Intra-Uterine Contraceptive Device cases	Oral pills users
1995-96	12,42,807	3,600	6,412	1,831
1996-97	12,23,360	3,113	5,576	2,014
1997-98	10,95,649	3,131	5,919	1,889
1998-99	11,43,787	2,910	6,081	2,182
1999-00	12,04,172	2,899	6,363	2,483
2000-01	10,80,439	2,588	6,518	2,598
2001-02	10,82,459	2,330	6,363	2,488
2002-03	9,79,170	2,125	5,954	2,711
2003-04	11,30,953	2,423	6,330	2,497

**Maternity and Child Health.**-A considerable number of women used to die during child birth. Many more who survived, suffered from lasting ill-health. The work for attending to maternity services, therefore, had to be taken in hand on priority basis.

Considerable progress has been made in the expansion of maternity and child health services. It has been made an integral part of the Family Welfare Programme. When the idea of small family is advocated, it is obligatory on the part of the Government to provide due coverage to maternity and child health. The care and service in this regard start as soon as a woman conceives. Special trained staff is employed for pre-natal, post-natal, infant and toddler care through

domiciliary and clinic visits. The required medicines and immunization of mothers and children against various diseases are provided. The maternity and child health work in rural areas is carried out by Lady Health Visitors, Auxiliary Nurse Midwives and trained *Dais*. The district has been divided among Auxiliary Nurse Midwives. Each Auxiliary Nurse Midwife covers a population of 5,000. This work is also done through immunization camps for mother and children. In these camps, children between the ages of 3 months to 5 years are immunized against polio, diphtheria, whooping cough, tetanus, measles and tuberculosis and pregnant women are immunized against tetanus and other diseases. These services in urban areas are provided by Hospitals and Community Health Centres.

**Primary Health Centres.-** The modern concept of health promotion lays basis stress on prevention of diseases through measures of health education and community involvement. So far as the rural area is concerned, these activities, besides medical care and Family Welfare Programme, are carried out by trained and skilled staff of the Primary Health Centres. All available resources of these centres are mobilized against the particular infection prevalent in a specific area in 2004. There are 14 Primary Health Centres in the district which are located at Pipli, Barna, Thaska Miraji, Jhansa, Deeg, Durala, Ismailabad, Khanpur, Kirmach, Saina, Saidan-Kalsand, Gudha and Babain. Every Primary Health Centre is managed by 2 Medical Officers who are assisted in their work by other paramedical staff.

These Centres take care of preventive and curative programmes. These include treatment of outdoor and indoor cases, maternity and child health, family welfare, environmental sanitation, nutrition, school and industrial health services, immunization programme and control of communicable diseases.

**Prevention of Adulteration in Foodstuffs and Drugs.-**Adulteration in foodstuffs is checked under the Prevention of Food Adulteration Act, 1954. Besides, the Food Inspector at the district headquarters and Sanitary Inspectors at tehsil headquarters are specially appointed and authorised under the provisions of the Act and all the Medical Officers have been vested with the powers of Food Inspector.

Samples of foodstuffs are seized in routine as well as through specially organised raids. The following table shows the work done during 1996 to 2004:-

Year	Samples seized	Cases of adulteration	Prosecution launched	Fine realised	Persons sentenced
1996	155	28	32	5,550/-	14
1997	147	36	24	2,000/-	9
1998	202	25	33	200/-	16
1999	117	28	28	12,000/-	9
2000	55	11	12	18,500/-	25
2001	98	15	14	-	16
2002	67	3	7	-	3
2003	123	22	16	3,500/-	3
2004	155	222	19	2,500/-	3

The Drug Inspector, Kurukshetra looks after the work relating to drug adulteration in the district. The following table shows the work done during 1995 to 2003:-

Year	Samples seized	Cases of adulteration
1995	96	12
1996	109	12
1997	70	10
1998	115	8
1999	75	5
2000	53	3
2001	116	12
2002	94	6
2003	154	1



**Nutrition.-** The Primary Health Centres deal with oral nutrition, particularly at maternity and child welfare centres by organising milk feeding programme, providing Vitamin A and B capsules, iron, multi-vitamin and B-complex tablets received by them from the UNICEF. They also help in arranging nutrients and medicines under school health services to the Education Department and the Red Cross Society. With the assistance of Government of India and UNICEF, the Applied Nutrition Programme is being carried out in all the blocks. It aims at educating people in taking a balanced diet from among the available food items. The demonstrations are arranged on proper cooking and emphasis is laid on food hygiene, consumption of general vegetables and cheap proteins.

**Environmental Hygiene.-** After personal hygiene and domestic cleanliness, environmental hygiene is equally important. With the coming up of development blocks, there has been an all round activities for the improvement of villages in regard to link roads, pavement of streets, *pucca* drainage and clean water supply by providing hand pumps, tubewells and wells. People are advised to deposit cattle excreta in dung pits. The salvaged water is disposed of either in ponds or drained out in open fields. Checking of food adulteration, sanitation, school health services and measures to control communicable diseases are some of the other factors which have contributed towards the improvement of environmental hygiene in rural areas. The villagers themselves are required to pay attention to environmental sanitation. Legal action can be taken against defaulters. However the staff of Primary Health Centers carry out environmental sanitation activities in their areas. The co-operation of village Panchayats is also sought to keep the habitations clean and tidy. The Medical Officers, the Sanitary Inspectors and other health workers guide the people. The villagers are advised to maintain manure pits and use latrines. But on the whole, the position cannot be called really satisfactory and much remains to be done. The position is somewhat better in the urban areas. Salvaged water is disposed of in the field and the cattle and human excreta is deposited in pits away from the residential areas where it is converted into compost and sold to farmers. These arrangements are looked after by the Municipalities with the help of health and scavenging staff.

Despite efforts by the various Government agencies to improve environmental hygiene, much remains to be done in this field. Haryana Government has now made concerted efforts in this direction and has announced during September, 2007 “Scheme for Financial Assistance to the Gram Panchayats for improved Sanitation-2007” under which Gram Panchayats will be given financial assistance for employing “*Safai Karamcharis*” for improving sanitary conditions in the villages on the basis of density of population as under:-

<b>Density of population</b>	<b>No of Safai Karamcharis to be employed</b>
Upto 2000	1
2000 to 5000	2
5001 to 10,000	4
Above 10,000	6

This Scheme, besides improving the sanitary conditions of the village will provide employment to the eligible “*Safai Karamcharis*”. In fact, the aim of good health has to become a part of the social and environmental habits of the individuals particularly the family.

**UNICEF Work and other Preventive Programmes.**-UNICEF is aiding promotion of public health in the district in many ways. In addition to providing vehicles for various health programmes and also to the Primary Health Centres, it supplies medicines and equipment including microscopes and refrigerators. All the Primary Health Centres in the district are getting UNICEF assistance.<sup>1</sup>

The programmes being aided by UNICEF include malaria, trachoma, nutrition, school health clinics, milk distribution and child health and B.C.C.

### **Sanitation**

The Health Department is responsible for the maintenance and improvement of sanitation. The Chief Medical Officer has the overall

<sup>1</sup> To qualify for such assistance, a Primary Health Centre must fulfill certain conditions, e.g. the staff must consist of at least one Medical Officer, one Pharmacist, one Lady Health Visitor and one Sanitary Inspector.

charge of the sanitation work in the district. He is assisted by Deputy Chief Medical Officer (Health). The Sr. Sanitary Inspector at district headquarters, Tehsil Sanitary Inspectors at tehsil level and Sanitary Inspector at Primary Health Centres look after the sanitation work within their respective jurisdiction. In urban areas, Municipalities through their sanitary and conservancy staff look after the removal and disposal of refuse, night soil and liquid waste and cleanliness of the surroundings of the towns. The underground sewerage facilities are available in most parts of Kurukshetra, Shahabad, Pehowa and Ladwa.

### **Water Supply**

**Water supply (Rural).**-In rural areas of the district, percolation wells, hand pumps and tubewells are the common sources of drinking water. Village ponds are generally used for cattle only.

At the time of formation of Haryana on November 1, 1966, only 2 villages of the Erstwhile district had piped water supply. A number of schemes have been executed since then under the National Water Supply and Sanitation Programme to provide piped water supply to the rural areas.

By March 1992, all the villages in Kurukshetra District were provided with piped water supply.

### **Water Supply (Urban)**

**Thanesar.**-A scheme for providing piped water supply in Thanesar town was prepared in 1959 and was completed before the formation of Haryana State in 1966. This scheme was based on tubewells and was designed to supply water at the rate of 20 gallons per capita per day. In 1971, another scheme amounting to Rs. 11.70 lakhs was designed to supply water at the rate of 30 gallons per capita per day. But it supplied 22 gallons per capita per day. Due to further increase in demand and in order to augment the existing water supply arrangements, another scheme at an estimated cost of Rs. 72.57 lakhs was prepared in June, 1984. By March 31, 2004, Rs. 74.85 lakhs were spent on this scheme. Another scheme costing Rs. 18.95 lakhs is also under progress to provide water supply in Shanti Nagar. By March 31, 2004, Rs. 16.93 lakhs were spent on the scheme. One more scheme estimated to cost Rs. 10.27 lakhs to provide one tubewell on Jhansa

road and one tubewell in Jyoti Nagar is also under progress. Upto March 31,2002, Rs. 8.22 lakhs have been spent on this scheme.

In addition to this, 7 schemes with an estimated cost of Rs. 417.93 lakhs were under progress to provide water supply facilities in various colonies of the town upto March, 2004, 32 tubewells provided water supply to the town and per capita water supply was 130 litres per day.

**Shahabad.-** In order to provide piped water supply to this town, a scheme costing Rs. 5.89 lakhs was executed in 1957. Another scheme for water supply was prepared in 1959-60 at an estimated cost of Rs. 4.74 lakhs. In 1961, 4 tubewells provided drinking water to the town. Due to further increase in demand and in order to augment the existing water supply arrangements. Another scheme costing Rs. 18.00 lakh was prepared in 1982. The estimate was revised to Rs. 25.95 lakh in 1985. The scheme is under progress and upto March 31,2004 Rs. 29.68 lakh was spent on the scheme.

Some other schemes with an estimated cost of Rs. 84.55 lakhs were also under progress to provide water supply facilities in various colonies of the town upto March, 2004 Rs. 22.04 lakhs had been spent on these schemes. In March 2004, 12 tubewells and 2 reservoirs water supply to the town at the rate of 100 litres per capita per day.

**Ladwa.-** In order to provide piped water supply to this town, a scheme costing Rs. 5.06 lakhs was executed in 1969. The scheme based on tubewells, was designed to supply water at the rate of 20 gallons per capita per day. Another scheme for augmenting the present scheme costing Rs. 2.45 lakhs was prepared in 1971. Piped water supply in the town was started in 1973.

In addition to this, 2 schemes with an estimated cost of Rs. 36.37 lakhs were under progress to provide water supply facilities in various colonies of the town. Upto March, 2004, Rs. 4.00 lakhs have been spent on these schemes. In March, 2004, 8 tubewells and 1 reservoir provided water supply in the town and per capita water supply in the town was 90 litres per day.

**Pehowa.-** In order to provide piped water supply to this town, a scheme at a cost of Rs. 4.42 lakhs was prepared and executed before the formation of Haryana State in 1966. The scheme was based on

tubewells and was designed to supply water at the rate of 20 gallons per capita per day. Due to further increase in demand and in order to extend the existing water supply, another scheme at an estimated cost of Rs. 3.70 lakhs was prepared and executed in 1971. Another scheme at an estimated cost of Rs. 16 lakhs was prepared in 1982 and revised for Rs. 19.15 lakhs in 1984. The scheme is under progress and Rs. 16.15 lakhs have been spent on the scheme upto March, 2004.

In addition to this, 2 schemes with an estimated cost of Rs. 72.87 lakhs were under progress to provide water supply facilities in various colonies of the town. Upto March, 2004, Rs. 35.36 lakhs have been spent on these schemes.

In March 2004, 9 tubewells provided water supply to the town and the per capita water supply was 130 litres per day.

**TABLE -I**  
**Hospitals and Dispensaries**

**Hospital**

L.N.J.P. Hospital, Kurukshetra.

**Community Health Centres**

1. Shahabad
2. Pehowa
3. Ladwa
4. Jhansa (old PHC) working CMC

**T.B. Centre**

1. T.B. Centre, Kurukshetra

**Primary Health Centres**

1. Pipli
2. Thaska Miranji
3. Ismailabad
4. Khanpur Kolian
5. Kirmach
6. Dhrala
7. Siana Saidain
8. Ramsharan Majra/ Babain
9. Kirmch
10. Tatka
11. Gadha
12. Deeg
13. Kalsana
14. Barna

**Sub Health Centres : 104**

**Allopathic Dispensary (Urban)**

1. Thanesar Civil Dispensary

**Ayurvedic Dispensaries**

1. Bani
2. Dabkhera
3. Mathana
4. Dhurala
5. Kalal Majra
6. Lukhi
7. Jadola
8. Umri
9. Gi,tja;a Garjau
10. Luhar Majra
11. Jyotisar
12. Murtzapur
13. Sarsa
14. Seonsar
15. Kirmach

**Ayurvedic College**

- Sh. Krishna Ayurvedic College & Hospital, Kurukshetra.