#### CHAPTER-XVI

## MEDICAL AND PUBLIC HEALTH SERVICES

### HISTORICAL BACKGROUND

No records are available about the state of public health and medical facilities that obtained in the district in early times. During the pre-Muslim period, Ayurvedic system of medicine flourished all over the country. The Unani system of medicine was introduced during the Muslim period under the patronage of Muslim rulers. By and large, the Hindu families patronised the Ayurvedic system while the Muslim favoured the Unani system. Thus, both the systems of medicine flourished side by side.

The Allopathic system of medicine was introduced during the British period. This system was based on scientific lines and vast research conducted in the western countries gave a progressive outlook to it. The British gave patronage to this system and a number of dispensaries were opened. We can have an idea of the popularity which the Allopathic system of medicine was gaining in the district towards the teens of the twentieth century from the following description:—

> "The work done in the larger institutions is of a very high order, and these dispensaries are freely resorted by the poorer classes and to a large extent by the well-to do middle classes. Operations for stone and cataract are done to a large extent, and the people (except in outlying villages) realize the benefits of European methods for these diseases and resort freely to the dispensaries for them. Other operations such as removal of tumours, amputations for necrosis, etc. are also performed with good results. The large attendance is itself a guaranttee of the good work done. *Baids* and *Hakims* are still, it is ture, found in most towns, but they are slowly becoming less popular: and those that remain often prescribe European medcines"<sup>1</sup>

In 1890, there was a 1st class dispensary at Sirsa under the charge of an Assistant Surgeon who worked under the Civil Surgeon, Hisar. The dispensary contained four wards having accommodation for 32 male and 8 female in-door patients. The staff consisted of an Assistant Surgeon, Compounder, Dresser and helpers. The dispensary was partly supported by the District Board

<sup>1.</sup> Hisar District Gazetteer, 1915, p. 242

5

7

×.

(Hisar) and partly by the Sirsa municipality. There was another 3rd class dispensary at Ellanabad which functioned under a Hospital Assisant. It was maintained exculsively out of the district funds.<sup>1</sup> The number of patients treated at both these dispensaries and the expenditure incurred during 1890 is given below<sup>2</sup>:

| Particulars              | Sirsa<br>Dispensary | Ellanabad<br>Dispensary |  |
|--------------------------|---------------------|-------------------------|--|
| Outdoor patients treated | 12,905              | 2,177                   |  |
| In-door patients treated | 428                 |                         |  |
| Expenditure (in Rs.)     | 3,191               | 614                     |  |
| Operations performed     | 974                 | 77                      |  |

Dispensaries at Dabwali and Rania were started in 1896 and 1901 respectively.<sup>3</sup> However, Dabwali dispensary had to be closed down in April 1904.<sup>4</sup> In 1935, there were ten dispensaries in the area now forming the Sirsa district. These dispensaries were located at Sirsa, Mandi Dabwali, Dabwali, Rania, Chutala, Rori, Madho Singana, Kalanwali, Ellanabad and Bada Gudha.<sup>5</sup>

After Independence, the national government was much concerned about extending medical and health services to the people. Medical institutions on modern lines were opened and provided with the necessary equipment and other facilities. Government also realised the importance of indigenous systems of medicine and established a Directorate of Ayurveda in November 1956. Besides, many new programmes to control and eradicate diseases were undertaken. In 1966 there were 27 (Allopathic 17 and Ayurvedic 10) institutions in the district which increased to 38 (Allopathic-23 and Ayurvedic 15) in 1981. With the increasing medical aid and the availability of life-saving drugs, most of the fatal diseases now no longer remain a source of fear. Consequently, mortality has decreased considerably.

#### MEDICAL AND HEALTH SERVICES

The medical and health services in the district are controlled and looked after by the Chief Medical Officer, Sirsa. He is assisted by a Deputy Chief Medical Officer (Health), Malaria Officer, District Family Welfare Officer, District School Medical Officer and District Tuberculosis Officer. He functions directly under Director Health Services, Haryana, Chandigarh. The General Hospital Sirsa is under the charge of a Medical Superintendent while the General

<sup>1.</sup> Hisar District Gazetteer, 1892, p. 225-26.

<sup>2.</sup> Ibid, Table XXXVIII.

<sup>3.</sup> Hisar District and Loharu State Gazetteer, 1912, Statistical Tables, Table 53.

<sup>4.</sup> Hisar District Gazetteer, 1904, p. 312.

<sup>5.</sup> Hisar District Gazetteer, Statistical Tables, 1935, Table 53.

Hospitals at Dabwali and Chutala are each under the charge of a Senior Medical Officer. Each primary heatlh centre (at block level) 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 malaria, smallpox, tuberculosis, trachoma etc. All dispensaries function under the supervision of a Medical Officer. Likewise, each Ayurdevic or Unani dispensary is under the charge of a Vaid or Hakim who functions under the control of the Chief Medical Officer, Sirsa.

Medical service is essentially a hospital organisation for medical relief to the public. This organisation embraces all Allopathic, Ayurvedic and Unani institutions, which on December 31, 1982 numbered 44 viz., 3 hospitals, 8 rural dispensaries, 3 canal dispensaries, 4 primary health centres, 2 subsidiary health centres, 1 T.B. centre, 1 E.S.I. dispensary, 1 railway dispensary, 19 Ayurvedic dispensaries and 1 Unani dispensary. A list of these institutions is given in Table XVI of Appendix. Besides, there were two private hospitals. The important institutions are described below :

General Hospital, Sirsa.—The hospital is located near Rori Gate. It has departments of medicine, surgery, gynaecology and dentistry. It also provides facilities of radiology and laboratory. It had 100 beds, 50 each for males, and females and 17 doctors and 72 members of ancillary staff in 1981-82. The number of indoor and outdoor patients during 1981 was 4,513 and 69,714 respectively.

General Hospital, Chutala.—Located on Dabwali-Sangaria road, the hospital was inaugurated in February, 1981. It is a 30 bedded hospital with dentistry, X-ray and laboratory facilities. It had 3 doctors and 24 members of ancillary staff in 1981. The number of indoor and outdoor patients during 1981 was 428 and 26,858 respectively.

General Hospital, Mandi Dabwali.—Initially started as a maternity hospital in 1958, it was converted into a civil hospital in 1968. It is a 28 bedded hospital with dentistry, X-ray and laboratory facilities.

In 1981, it had 2 doctors and 18 members of ancillary staff. The number of indoor and outdoor patients in 1981 was 1,782 and 15,959 respectively.

Janta Maternity Hospital-cum-Child Welfare Centre, Sirsa.—Inaugurated in 1979, the hospital is located in the New Mandi area. The hospital provides medical facilities to the general public at minimum cost and even free to deserving poor patients. A Medical Superintendent is in-charge of the hospital who is assisted by a male medical specialist, a gynaecologist and other ancillary staff.

It is a 30 bedded hospital with laboratory facilities. The number of outdoor and indoor patients treated in the hospital during November 1979 to December 1981, was 28,486 and 2,657 respectively.

Seth Ram Dutt Charitable Eye Hospital, Sirsa.-Started in 1951, the hospital is run by Seth Ram Dutt Chartiable Trust, Sirsa. The hospital runs free eye O.P.D. and has facilities for the eye surgery including catract, glaneoma and squint. It is a 35 bedded hospital.

In 1981, it had one doctor and 7 members of ancillary staff. The number of indoor and outdoor patients in 1981-82 was 320 and 5,413 respectively.

## DISEASES COMMON TO THE DISTRICT

The common diseases which occur in the district are gastro-enteric diseases and typhoid group of fevers, chest infection, tuberculosis, malaria and trachoma. Epidemic diseases viz., cholera, plague and smallpox are the three notifiable diseases under the Epidemic Diseases Act, 1897. Of these, plague and small-pox have been eradicated. The incidence of cholera is dependent largely on the chance of importation of infection and laxity of preventive measures to check them. No case of cholera has, however, been reported in the district since 1967.

Plague has become non-existent. Gastro-enteric diseases, and small-pox have been effectively contained. Malaria has again raised its ugly head but effective steps are aboot to control this parasitic disease. Leprosy is completely alien to this area. The checking of diseases is attributable to the adequate preventive measures taken by the government after Independence. Medical facilities are being expanded and provisions are being made to make available more and more specifalised 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., the periodical Kumbh fairs at Hardwar (U.P.), solar and lunar eclipse fairs at Kurukshetra and similar gatherings at other places. Cholera epidemic cropped up by infection from water. Generally, there was great scarcity of drinking water. Human beings and cattle used to drink in most cases from the same village pond, and both bathed in it promiscuously. The water used to get contaminated and consequently spread

The position has now greatly improved due to the strict prophylactic and other anti-cholera measures like medical inspection posts and mass inoculin hospitals and dispensaries. But the most important measure necessary to obviate the incidence of this disease was arranging the supply of safe and secure potable water. By 1982, safe drinking water-supply has been provided to 139 villages while the scheme for providing piped water to 12 more villages is in progress. Besides, people now also get drinking water from hand pumps, wells and tubwells. In some villages people have constructed pucka

tanks with arrangements for storing clean 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 completely controlled.

Plague.—The plague first appeared in the district in 1903 and thereafter it showed itself with greater or less severity every year.<sup>1</sup> This epidemic was the most feared and always resulted in a loss of big number of human lives. Between October 1904 and May 1905 the epidmic was particularly violent. In 1910, another severe epidemic visited the district. There was recurrence of plague again in 1925 and also in 1926. Thereafer, it has completely subsided. Fortunately, this horrible disease has now become an occurrence of the past. The factors determining its disappearance have been spraying of houses with insecticides to kill rat fleas and systematic de-ratting measures.

Small-pox.—One of the most contagious and killer diseases, small-pox earlier used to occur in an epidemic form and many people became disfigured, lost their eyes or other organs or died of it. In the beginning of the present century vaccination was not compulsory. The people were averse to it, though its good effects had been repeatedly explained to them. As a result of various preventive measures taken by the government including mass vaccination and re-vaccination, small-pox has become non-existent. Under the Small-pox Eradication Programme, Supervisors and Vaccinators were posted in health centres and municipialities. Special care is taken to vaccinate all the new

The following figures show the work done under the Small-pox Eradication Programme during the period 1976 to 1981:---

| Year | Vaccina                               | Vaccinations Performed |                |  |
|------|---------------------------------------|------------------------|----------------|--|
|      |                                       | Primary                | Re-vaccination |  |
| 1976 |                                       | 21,609                 | EA 450         |  |
| 1977 |                                       | 27.480                 | 34,439         |  |
| 1978 |                                       | 24 522                 | 33,271         |  |
| 1979 |                                       | 24,525                 | 20,954         |  |
| 1980 |                                       | 27,925                 | 23,384         |  |
| 1981 | •                                     | 23,365                 | 11,386         |  |
|      | · · · · · · · · · · · · · · · · · · · | 13,497                 | £ 5,070        |  |

Hisar District Gazetteer, 1915, p. 51-52

Malaria. - In the past, malaria was responsible for a very heavy toli of life. As the village reporting agencies were not qualified to distinguish between Malaria or other fevers, no reliable figures of death are available. However, in 1915, the use of quinine as a cure for the malady was becoming more understood by the people, though they did not properly appreciate its prophylactic qualities.<sup>1</sup> In 1942, there was a severe and wide spread epidemic of malaria. To control this disease which was a major health menace from the point of view of sickness, vitality and mortality, the Government of India initiated a centrally sponsored and aided National Malaria Control Programme in 1953. This programme was redesigned as the National Malaria Eradication Programme in 1958. The object originally was to curb the malaria menace to such an extent that it may not cause any set-back in economic and social development of the country. The insecticidal spray on mass basis in the first phase, known as the attack phase, gave encouraging results and the incidence was controlled to the desired level. In 1958, the scope of the campaign was enlarged to ensure eradication of the disease from the community. All the areas, both urban and rural, were covered under this programme. Besides, the insecticidal spray in each and every house, every fever case or every case having a history of fever was also screened by basic health workers during house to house visits fortnightly. The blood slides so collected were examined microscopically for detection of malaria parasites and the persons found positive for malaria were given radical treatment for five days. Other remedial measures were also taken under the supervision of senior supervisory staff. As a result of these intensive activities malaria was effectively controlled and curbed by 1963. It was followed by a maintenance phase in which surveillance alone was kept.

Of late, however, the mosquitoes responsible for transmission of malaria have developed resistance against insecticides, viz., D.D.T. and B.H.C. and as a result, there has been a recurrence of malaria cases. The influx of labour on a mass scale from the other states where surveillance had not been properly kept has also caused increase in malaria incidence. A tendency among people to treat the malaria cases as a ordinary fever cases and thus avoiding prompt action has also led to its increase. As malaria cases increased, steps had to be intensified against this disease as in the past.

A separate malaria unit for the Sirsa [district was started in October 1975. The Malaria Officer under the guidance of Chief Medical Officer implements the Malaria Eradication [Programme. In 1976, he was assisted by the one Assistant Unit Officer, 10 Senior Malaria Inspectors, 52 basic health workers, one senior laboratory technician, 2 laboratory technicians and five Swasth Sahayaks. In 1981, the malaria unit was strengthened and placed

under a District Malaria Officer who was assisted by a biologist, one Assistant Unit Officer, one senior laboratory technician, three Senior Malaria Inspectors and 198 members of malaria staff.

Selective areas of the district was taken up for D.D.T. 1976. The flood affected areas were sprayed with B.H.C. However, the cases of malaria detected in the district during 1976 to 1981 follows :--were as

| Year |  |   | Malaria Cases Detected |
|------|--|---|------------------------|
| 1976 | · .  | • |                        |
| 1977 | and the second second  |   | 21,948                 |
| 1978 |  |   | 24,180                 |
| 1979 | and a second |   | 18,730                 |
| 1980 |  |   | 13,703                 |
| 1981 |  |   | 7,443                  |
|      | •  |   | 7.595                  |

Tuberculosis.—This is common in the district though not to the extent of posing a major public health problem. During 1976 as many as cases were registered and 4 deaths occurred in government medical institu-2.030 tions in the district. A B.C.G. team is functioning effectively for providing B.C.G. inoculation as a preventive measure against this disease. A T.B. centre is functioning at Sirsa for providing specialised treatment to the pati-The patients are examined here and necessary medicines are prescribed. Besides, precautions are explained to them so that they could continue their treatment while staying at home. Serious cases, however, are given indoor treatment whenever necessary in hospitals and primary health centres. Cases requiring further specialised treatment are referred to T.B. Hospital, Hisar, for admission.

Trachoma.—To eradicate this common disease of the area, 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. The work is supervised by four Trachoma Supervisors stationed at the primary health centres of Rania Madho Singhana, Odhan and Bada Gudha. Facilities for the treatment of this desease are also provided in the genera' hospitals and rural dispensaries.

Leprosy.—The district is almost free from this disease. During 1976, State Laws only two patients were given outdoor treatment and both had come from out-

281

## SIRSA DISTRICT GAZETTEER

**Gastro-enteric Diseases.**—The most common infectious diseases are typicoid and enteric group of feyers, dysentery and diarrhoea, disease of 5F's-flies, fingers, faces, fomites and food. Every effort is being made to control these diseases by adopting 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 statisfactory results achieved by the Health Department are reflected in reduced incidence of disease and lower mortality-both infant and adult. The table XVII of Appendix showing the number of deaths caused by different diseases from 1976 onwards and the following table showing birth and death rates and the infant mortality from 1976 onwards illustrates this position :--

| Year | Birth Rate per<br>Thousand of<br>Population | Death Rate per<br>Thousand of<br>Population | Infant Mortality<br>(under 1 year of<br>age) per Thousand<br>of Live Birth |
|------|---|---|--|
| 1976 |   |   |  |
| 1000 | 20.35                                       | 5.71  | 43.61  |
| 19/7 | 20.06                                       | 6.71  | 51.69  |
| 1978 | 19.64                                       | 5.57  | 42 70  |
| 1979 | 20, 63                                      | 5 10  | 72.19  |
| 1000 | 20.05                                       | 5.17  | 35.26  |
| 1300 | 21.50                                       | 5.41  | 41.73  |
|      |   |   |  |

GENERAL STANDARD OF HEALTH

The general standrad of health of the people in the distrist is fair. They are generally tall and healthy. Their diet though rich in carbohydrates, is deficient in protein and to some extent in fats and vitamins. Majority of the people are vegetarians and only few take meat, eggs and fish. Bishnois are strictly vegetarians.

Large families among low income groups are generally underfed. They suffer from both mal-nutrition and under nutrition. The family welfare services have still to make an effective impact on family budgets and nutrition.

## PREVENTIVE MEASURES TO PROMOTE PUBLIC HEALTH

The modern concept of good health lays greater emphasis on prevention of diseases and this necessitates verious kinds 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. Like-wise, family welfare and maternity welfare require 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 focd, make supply of clean and safe drinking water possible for even those living in rural areas and to take other such steps as will improve environmental hygiene.

School Health Service.—The first school health clinic in the district was started in 1976. In 1972, school health service was made an integrated 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 pharmacist for schools and for proper sanitation arrangements.

School children studying in classes, I, VI and IX are thoroughly checked and arrangements are made for the treatment of those found ill. The following figures show the school health work done in the district since 1979.

| Year | Children<br>Examined | Children Found<br>Ill and Treated |
|------|----------------------|-----------------------------------|
| 1979 | 2,283                | 1,235                             |
| 1980 | 3,342                | 727                               |
| 1981 | 3,450                | 537                               |
| 1982 | 4,187                | 992                               |

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

Health education has been made an integral responsibility of all medical and para-medial personnel in the district. It is mainly carried out through the staff of the health centres. It is generally imparted by means of lectures,

SIRSA DISTRICT GAZETTEER

film shows, leaflets, posters, radio, T.V. and newspapers. Interviews, group discussions, seminars and panel discussions are also arranged to create health consciousness among the people.

Family Welfare.—For family welfare programme, a three dimensional approach of education was formulated, viz., the mass approach, the group approach and the individual approach. In mass approach, all available modern<sup>•</sup> communication media are employed 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, seminars and orientation training camps. 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 the users of family planning methods are utilized in motivating people.

All activities of family welfare programme in the district are carried out under the guidance and supervision of the Chief Medical Officer. Under him, the District Family Welfare Officer is responsible for proper implementation of this programme. At 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 an extension educator, family welfare field workers, lady health visitors, auxiliary nurse midwives and trained *dais*. At village level, services are rendered by field workers and rural dispensaries.

The Haryana branch of Family Planning Association of India runs 10 family welfare centres. These centres are designed to supplement and complement government efforts in regard to fertility control by providing referral services, motivation, follow-up and maternity and child health care. The family welfare units aim at extending family welfare services in the outlying rural areas by intensifying educational net-work and providing on the spot clinical services to the rural and semi-urban community which is not well served. These centres serve through sub-centres established in the peripheral area. A team comprising medical officer, auxiliary nurse midwife and field workers pays regular visits to the sub-centres and provides services at the door steps of the acceptors.

The family welfare practices cover methods for limitation of families as also for spacing of children. The former include sterilization of males and females and the insertion of I.U.C.D. (intra uterine contraceptive device popularly known as the 'loop'). The latter include the use of condoms, diaphragm, jellies, foam tablets and oral pills. The conventional contraceptives such as condoms, diaphragm, foam tablets, jellies, etc. are distributed through contraceptive depots/centres including rural post offices. Besides, free medical and surgical services, transport and diet are arranged for sterilization cases. Cash incentives are also offered.

The family welfare programme in the district have made considerable progress. The following data shows the progress of family welfare work in the district from 1975-76 to 1980-81.

| Year    | Conventional<br>Contraceptives<br>Distributed<br>(Pieces) | Sterilization<br>Cases | Inter-Utrine<br>Contraceptives<br>Device Cases |
|---------|---|------------------------|--|
| 1975-76 | 16,29,845   | 4.577                  | 6 612  |
| 1976-77 | 16,23,875   | 8 833                  | 0,013  |
| 1977-78 | 5.83.850  | 410                    | 7,089  |
| 1978-79 | 4.07.720  | 410                    | 1,476  |
| 1070.90 | 4,07,739  | 1,039                  | 1,273  |
| 1979-80 | 4,19,319  | 1,928                  | 1,394  |
| 1980-81 | [3,75,696   | 2,300                  | 1,305  |

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

Considerable progress has been made in the expansion of maternity and child 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 service in th's regard starts 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*. Arrangements are made to train *dais* who already practise in villages. The services in urban areas are provided by all the health and medical institutions including maternity and child health centres at Sirsa and Kalanwali.

**Primary Health Centres.**—The modren concept of health promotion lays basic 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 the trained and skilled staff of the primary health centres.

\*

All available resources of these centres are mobilised against the particular infection prevalent in a specific area. There are 4 primary health centres in the district which are located at Odhan, Bada Gudha, Rania and Madho Singhana. Each primary health centre is manned by 3 Medical Officers except primary health centre Rania, where there are 2 Medical Officers. Officers are assisted in their work by other para-medical staff. The Medical

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 food stuffs and drugs.—Adulteration in food stuff is checked under the Prevention of Food Adulteration Act, 1954. Besides, the Food Inspector in the district, specially appointed and authorised under the provisions of the Act, all the Medical Officers have been invested with the powers of Food Inspector.

Samples of food stuffs are seized in routine as well as through specifically organised raids. The following table shows the work done during 1976, 1980 and 1981 :---

|   | 1976                       | 1980                      | 1981         |
|---|----------------------------|---------------------------|--------------|
| I otal number of samples seized<br>Samples found adulterated      | 331                        | 88                        | 192          |
| Prosecutions launched   | 60<br>62<br>(2 relating t  | 26<br>26                  | 47<br>48     |
| Fine realised (Rs.)<br>Number of persons sent to jail (convicted) | samples of 1<br>7,680<br>4 | ist year)<br>10,500<br>12 | 11,850<br>16 |

The Drug Inspector, Hisar used to look after the work relating to drug adulteration in the district prior to the appointment of an independent Drug Inspector at Sirsa in July, 1976.

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 D capsules, iron, multi-vitamin and B-complex tablets received by them from the UNICEF. They also help in arranging nutrient and medicines under school health services to the Education Department and the Red Cross Society. With the assistance of Governmentof India and UNICEF, the Applied Nutrition Programme is being carried out in all the blocks. It aims at educating people in taking a balanced and nutritive diet from among the available food items.

Environmental hygiene.—After personal hygiene and domestic cleanliness environmental hygiene is equally important. The sanitation of towns and village streets and lanes and disposal of kitchen wastes and human excreta are

With the coming up of development blocks, there has been an allround activity for the improvement of villages in regard to link roads, pavement streets, pucka drainage and clean water-supply by providing hand pumps, tubewells and ideal wells. It is advised that the cattle excreta be deposited in dung pits located outside the villages. The sullage water is disposed of either in ponds or drained off in open fields. Checking of food adulteration, sanitation, school health services and mesures 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 centres 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 Officer, the Sanitary Inspectors and other health workers guide the people. villagers are advised to maintain manure pits and use public or indivudual But on the whole the position cannot be called really satisfactory latrines. The and there remains much to be done. The position is some what better in the Sullage water is disposed of in the fields 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.

description of programmes, undoubtedly that a great deal has been done, a great deal more is planned, and and activities shows objectives and methods have been defined. It would be wrong, however, to conclude that all is well. The fact is that the aim of good health has to become a part of the social and environmental habits of the individual particularly the family.

UNICEF work and other preventive programmes.—UNICEF 1s 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 to the latter, medicines and equipment including microscopes and refrigerators. All the primary health centres in the district are getting UNICEF assistance.<sup>1</sup>

The programme being aided by UNICEF include malaria, trachoma, nutrition, school health clinics, milk distribution, maternal and child health

To qualify for such assitance, a primary health centre must fulfill certain conditions 1. e.g. the staff must consist of at least one Medical Officer, one Pharmacist, one Lady Health Visitor and one Sanitary Inspector.

### WATER SUPPLY

Water Supply (Rural).---Village ponds and percolation wells were the only source of drinking water in rural areas of the district in the past. At present, even source of drinking water in most of the rural areas include open percolation wells and kachcha ponds which are filled with canal water. The underground water is generally brackish. In certain areas where the canal water is collected in exposed kachcha ponds, it is used both by human beings and the animals. This adversally affects the health of the people and they are subjected to water borne diseases. In order to ameliorate the miserable plight of the people, government decided to provide piped drinking water-supply after thorough filtration of the canal water. This project has been taken up under the National Water-Supply and Sanitation Programme. All the villages in the district are to be covered under this programme by 1990. At the time of the formation of Haryana on November 1966, only 19 villages were served with piped drinking water-supply. By March 1981, 91 more villages were provided piped water-supply and this brought the total number of such villages to 110. Besides, the work for providing piped water-supply was in progress in 54 villages. By March 1982, 129 villages were provided water supply facilities in the district.

The total expenditure on water supply scheme in the district as on March 31, 1981, has been Rs. 353.68 lakh. Some details of these schemes are given in Table XVIII of Appendix.

Water Supply (Urban).—The piped water supply to Kalanwali was made in 1957, Dabwali in 1959-60 and to Sirsa in 1965. The water supply was not sufficient and did not cover the entire towns. These municipalities took up the projects to supplement the water supply and to cover the entire town. A scheme to supply piped water to Rania was commissioned in 1981.

#### SANITATION

The Health Department is responsible for the maintenance and improvement of sanitation. The Chief Medical Officer has the overall charge of the sanitation work in the district. He is assisted by Deputy Chief Medical Officer (Health). The senior Sanitary Inspector at district headquarters, tahsil Sanitary Inspectors at tahsil level and Sanitary Inspectors at primary health centres look after the sanitation 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 were available in Sirsa and Dabwali towns and even these towns were not covered entirely.