

MEDICAL AND PUBLIC HEALTH SERVICES

Medical Facilities In Early Times

Here, as elsewhere in the country, diseases in the distant past were generally attributed to misdeeds and involved equal attention of the physicians and sorcerers.

Ayurveda which is perhaps the oldest system of medicine known to the people of this district was practiced by persons called vaid.

Contacts with other nationals particularly the Greeks and Muslims led to the introduction of Unani system of medicine whose propagators were known as hakims. In medieval times both Ayurvedic and Unani systems of medicine flourished side by side. A sort of surgery was practiced by jarrahas who were generally of barber class and there were satias who performed eye operations including those of cataract.

The British introduced so called western system of medicine popularly known as allopathy which, being progressive in nature immediately effective and government sponsored advanced so rapidly that the older methods of cure, gradually lost their sway.

In spite of unhealthiness of the climate and the crying need for medical assistance in the outlying tracts no branch dispensaries were built till 1857 except at Bansi (now in Basti district). In 1868 the rani of Satasi built and for many years supported the dispensary at Rudrapur. In 1869 a dispensary at kasia (now in Deoria district) was opened which was enlarged in 1974 and later shifted to a new building erected by raja of Salimgarh. The district committee started other dispensaries at Barhalganj in 1873, and at Maharajganj in 1876, while in the same year the Bela-Haraiya dispensary was opened. These were followed by the establishment of dispensaries in 1887 at Tamkuhi, in 1888 at Deoria in 1894 at Barhaj in 1904 at Dumri and in 1907 at Bansaon. The district board controlled the Dufferin Female Hospital Gorakhpur. It was opened in 1890 and it was financed by subscriptions and endowments, the whole amounting to Rs 1,450 per annum. Besides these hospitals there was a private charitable dispensary at Padrauna as well as a police dispensary and a railway dispensary.

The following table gives a chronology of the early history of allopathic dispensaries in the district:

Name of Dispensary	Year of establishment	Maintained by
Government Allopathic Dispensary Gorakhpur	N.A.	Government
Rudrapur Dispensary	1868	Rani of Satasi
Barhalganj Dispensary	1873	District Committee
Maharajganj Dispensary	1876	District Committee
Bala Haraiya Dispensary	1876	District committee
Sadar Dispensary	1905	District Board
Bansaon Dispensary	1907	District Board

VITAL STATISTICS

The registration of deaths and births was attempted for the first time in 1865, but the results were not quite satisfactory. An improved method was adopted in 1872. For the four years ending with 1880, a period marred by excessive mortality from fever and other epidemics, the annual average death-rate was 34.47 per thousand. In the next decade the average death-rate was 27.47 as compared with a mean annual birth-rate of 41.93 per thousand. The following ten years were less healthy for while the death-rate from 1891 to 1900 average only 28.08, that of birth-rate fell to 32.19 and on more than one occasion the

former exceeded the latter, such was the case in 1894, when fever was abnormally prevalent and great havoc was wrought by cholera. The death-rate being 43.78, which is higher than that in any previous or subsequent year, and also in 1897, a season of general famine, when fever again caused widespread mortality and the death-rate rose to 35.92 per thousand. Subsequent years have shown an improvement.

The following statement shows the mean decennial registered birthrate and death-rate per thousand of the population of the five decades ending with 1950:

Decade	Birth-rate	Death-rate
1901-1910	38.9	28.9
1911-1920	38.6	29.8
1921-1930	30.0	18.4
1931-1940	30.5	18.8
1941-1950	20.3	14.2

The vital statistics of the district indicate that in the normal years the birth-rate is higher than the death-rate.

Infant Mortality

Mortality among children below one year of age was quite high in the past, mainly because of lack of adequate maternity and child welfare services.

The following statement gives the number of births and deaths of infants in the district from 1961-71:

Year	No. of Births	No. of death
1961	42,300	4,494
1962	41,278	4,603
1963	34,266	3,507
1964	37,656	1,867
1965	38,554	4,665
1966	38,247	1,310
1967	37,718	1,774
1968	34,896	750
1969	18,078	470
1970	17,104	567
1971	26,310	599

DISEASES

Epidemics

While plague has ceased to be a scourge, cholera and smallpox continue to take a heavy toll of life in the district.

Plague-It is reported to have made its first appearance in the district in 1902 when 3,677 persons were carried off. Thereafter it raged with varying intensity, especially in the south of the district; years of the highest incidence being 1911 and 1918, when 14,980 and 14,895 persons died.

The following statement gives the mean decennial deaths caused on account on plague during the five decades beginning from 1901:

Decade	Average mortality
1901-1910	5,761
1911-1920	8,711
1921-1930	3,387
1931-1940	N.A.
1941-1950	2,685

The routine anti-plague measures in the district until the advent of D.D.T. in 1947, consisted of cyanogen of the rat burrows in the infected and surrounding villages single dose mass inoculation with Haffkine plague Vaccine and occasionally evacuation of houses or village during outbreaks. Mass destruction of rats by poison baiting was also undertaken. Since 1951 one case has been reported from the district.

Smallpox- Smallpox used to be at its highest during the warm weather with its peak in the month of May which happens to be hottest and the dustiest month of the year.

In pre-vaccination days the disease was considered contagious for children in particular. This was not for reason that smallpox was respecter of any age but because persons in the higher age grounds almost invariably had contacted the disease in childhood and as such became resistant to future attacks.

Under the Vaccination Act of 1880 primary vaccination is compulsory for children in municipalities, notified areas and in a number of town areas but it can be extended to other localities on the out break of an epidemic. Vaccination is undoubtedly a safeguard and does much to reduce the mortality. The following statement gives mean figures of decennial deaths in the district due to smallpox during the last three decades:

Decade	Average deaths
1911-1920	331
1921-1930	343
1941-1950	839

There was a severe outbreak in 1891 which was responsible for 17,469 deaths. In 1907 wen smallpox raged thought the State deaths in this district numbered 3,166. Another disastrous epidemic occurred in 1908 taking a toll of 7,985 lives. From 1956 to 1960 the disease remained mostly under control ; only 12 deaths were reported in 1956 and 17 in 1957. No death was recorded in 1958,1959 and 1960.

The following statement gives the number of deaths in the district due to smallpox from 1961 to 1971:

Year	No. of deaths
1961	2
1962	5
1963	83

1964	12
1965	69
1966	5
1967	567
1968	13
1969	--
1970	34
1971	63

Chicken-pox - Chicken-pox is a mild disease. The attack is hardly noticeable ; there may be a little fever and some restlessness. The rash appears and consists of tiny red spots. they come out in crops and as the vesicles dry up crust from them drops off leaving no scars. In 1973 and 1974, 43 and 60 cases were reported and 7 persons died in 1974.

Measles - Measles is essentially a disease of childhood, caused by a filter-passing virus. The infection is carried by the catarrhal discharges from the nose and throat. The symptoms of measles are cold running of the nose, headache chill sore throat cough and high temperature. In 1974, 109 cases and 19 deaths were reported.

Cholera- Cholera is a notorious epidemic of this area It usually appears in March April, reaches the top in June, and recedes with the advent of monsoon in July, again rising slightly in August due to infestation of house flies. The winter season is absolutely free. Infection is also brought sometimes from the north-easterly sub-Himalayan districts of Nepal where cholera cases are common.

The disease is contracted through infected food and contaminated water. The principal feature of cholera is a profuse watery discharge from the bowel.

The district was never free from cholera which frequently assumes an epidemic form and owes its rapid dissemination to the absence of precautionary measures in the part of the people. From 1877 to 1907 there was only an year in which the reported from cholera numbered less than a hundred i.e.in 1998 when only 52 deaths were reported and in all for six years they exceeded a thousand. For the first four years the average was 3,217 or 4.59 per cent of the total mortality. in the ensuing decade the figure rose to 4,419 of 9.77 per cent; the increase arising mainly from the epidemic of 1887, which accounted for 15,135 deaths. From 1891 to 1900 matters were also worse when the disease carried off 6,313 persons annually or 7.51 per cent of the total number reported. Serious epidemics were frequent but all were eclipsed by tat of 1894 which resulted in 26,081 deaths. Since 1901 matters have improved a little the average for next seven years being 4,157 deaths but this would have been far lower save for the widespread outbreak introduced from Nepal in 1906 when 15,132 persons lost their lives.

The following statement gives the number of deaths caused by cholera from 1961 to 1971:

Year	No. of death
1961	2
1962	1
1963	2
1964	--
1965	--
1966	3
1967	87
1968	--
1969	--
1970	20

Gastro-enteritis

The disease is common during the summer season beginning from March to April. The victims present cholera like symptoms; vomiting, diarrhea dehydration and even suppression of urine and are sometimes labeled as cholera cases on account of clinical similarities of the disease. To differentiate these two types of cases government have decided to label all non-choleric cases as 'gastro-enteritis' patients. From 1971 to 1974 no case of gastro-enteritis has been reported in the district.

Enteric Fever (Typhoid Fever or Paratyphoid Fever) Typhoid Fever so called because it was once thought to resemble typhus is caused by a germ *Bacillus typhosus*. The infection is contained in evacuations from the bowel and spread by germs getting into water milk or other items of diet. Major sufferers are young people between 15 to 30 years of age. This fever is more prevalent during the period from August to November. The seat of disease is in the lower part of the small intestine and ileum. The incubation period is from seven to twenty one days.

The following statement shows the mean decennial number of deaths due to various fevers from 1901 to 1950:

Decade	No. of deaths
1901-1910	49,765
1911-1920	58,889
1921-1930	46,338
1931-1940	N. A.
1941-1950	11,779

The following statement gives the number of deaths on account of various fevers in the district from 1961 to 1971:

Year	No. of deaths
1961	16,286
1962	15,380
1963	13,788
1964	16,218
1965	10,046
1966	14,583
1967	12,056
1968	9,870
1969	170
1970	2,133
1971	2,390

Infectious and Contagious Diseases

An infectious disease is one which may be transmitted from one person to another either by direct personal contact or conveyed by means of the air or carried by food, water, articles of clothing or other media. A contagious disease is one which is communicated by direct contact so that a contagious disease is always infectious but an infectious disease is not necessarily contagious.

Infection is spread by means of minute living organisms called germs or micro-organisms. These germs enter into the body, multiply and produce a condition of inflammation and poisoning. Each disease has its own particular micro-organism which enters the system in different ways.

Diphtheria - It is a contagious disease characterized by a local exudation on the mucus surface generally of the throat, producing the so called 'membrane'. This membrane is like yellowish wash leather and appears first on the tonsils and then spread to the soft palate to the larynx or to the nose. The disease is caused by a micro-organism known as the Klebs Loafler bacillus named so after the two pathologists who discovered it. The infection is carried by the discharges from the throat and larynx and outbreak of the disease has been traced to bad sanitary arrangements and to contaminated milk. Diphtheria is disease of children up to five years of age. In 1972, 10 cases of diphtheria and in 1973, 8 cases reported from the district.

Influenza- Influenza is an all the year round disease tending to be epidemic particularly prevalent in the early spring. It is an infectious fever caused by virus a specific organism called pfeiffers bacillus. The incubation period is from one to three days, it is marked by severe headache or pain in back and limbs and low fever. In the second decade of the present century mortality from influenza was quite high. In 1972 and 1973, 526 and 312 cases respectively of influenza were reported from the district.

Whooping Cough- Whooping cough is a contagious disease characterized by a peculiar convulsive cough is followed by a long-drawn inspiration through the nearly closed glottis, by a crowing noise or 'whoop'. It often occurs in epidemic form during the spring and autumn. It is common in children between the ages of one to seven years of age and frequently follows measles. Its symptoms are bad cold, slight fever and dry cough. The cough is more marked and troublesome at night. In 1972, 957 and in 1973, 839 cases of whooping cough cases were reported from the district.

Tuberculosis- Tuberculosis is caused by the tubercle bacillus. The two varieties of it are met with - the human and the bovine. Man becomes infected with the human tubercle bacillus by inhalation of the germs from the sputum of an infected patient. The bovine bacillus causes abdominal tuberculosis by the ingestion of milk or the flesh of a tuberculous cow. Both kinds may also produce tuberculosis of bones, joints or skin (lupus). Certain types of jobs make a person more prone to the disease; mill-workers, mint workers, grinders, stone cutters, miners etc., have been found to suffer largely on this accounts, 426, 402 and 418 cases of tuberculosis were reported in the years 1972,1973 and 1974 respectively.

Diarrhoea and Dysentery- Bowel complaints such as diarrhoea and dysentery, usually cause a great number of deaths. Dysentery is an inflammation of the mucus membrane of the colon and may be of the bacillary or amoebic type; the former causes summer diarrhoea in children. The disease is spread by flies, contaminated food or water and human carrier. The symptoms are acute pain in the abdomen, a constant desire to go to stool, straining, sweating, restlessness and a furred tongue. The stool may contain foecal matter but frequently consists entirely of mucus or mucus tinged with blood if there is ulceration.

The stools are watery and very foul smelling. In severe cases the patient may be delirious, or may lapse into a coma and collapse.

The worst ever affected year in the district being 1911 when 1,846 deaths occurred due to bowel disorders. The number was below a thousand almost every year till 1920. During the next three decades ending with 1950, the deaths being always fewer than 500 except in 1945 and in 1947 when their number was 553 and 571 respectively. During the period of five years from 1956 to 1960, the disease once again took a high toll of life when 2,137 persons died annually.

The following statement gives the number of persons died due to bowel disorders from 1961 to 1970:

Year	No.of deaths
1961	1,614

1962	1,880
1963	868
1964	321
1965	1,013
1966	306
1967	531
1968	264
1969	46
1970	227

DISEASES OF RESPIRATORY ORGANS

These diseases were included in the category of fevers before 1941. Such diseases are not an immediate cause of death but they often cause permanent or temporary infirmity and in some cases even premature death. Acute pneumonia is due to pneumoconiosis which may affect one or more lobes of the lungs. The onset of the disease is sudden with severe rigor and great prostration.

Broncho Pneumonia- This respiratory disease occurs commonly in young children and old people and is characterized by small patches of consolidation in the lungs. It is a frequent complication of measles, whooping cough and other fevers.

Acute Bronchitis- The causes are exposure to cold and wet or both ; irritant vapours may cause it or it may be an outcome of catarrh. It is a frequent complication of infectious fevers, especially of accompanying measles.

Bronchiectasis- Bronchiectasis or dilatation of the bronchial tubes generally occurs in connection with some other lesion of the bronchi or lungs. It is caused by weakening of the bronchial walls especially in cases of chronic bronchitis or it may result from a fibroid condition of the lungs. The symptoms are similar to those of chronic bronchitis but the cough is paroxysmal and there is expectoration.

Pleurisy - The disease occurs at all ages and the cause may be local or general; local due to a fractured rib or caries of spine; general, as the result of infection from phthisis or pneumonia. It is characterized by a stabbing pain in the chest which increases through breathing and change of position.

Asthma- It is caused by spasm of the muscles of the bronchial tubes which produces sudden attacks of dyspnoea. The attacks may last for a few minutes or for a long time and are very distressing. At the end of attack, the patient coughs and brings up sputum. In chronic cases there is wheeziness and distressed breathing at all times. The attacks are sometimes due to obstruction of the nasal passage by adenoids, polypi or a deflected septum. Surgical treatment then becomes necessary.

Acute laryngitis- It comes on suddenly with a dryness and tickling of the throat and pain on swallowing. The voice becomes husky and speaking is painful; sometimes the voice may be completely lost coughing develops and mucus is expectorated.

Phthisis- Phthisis is caused by the tubercle bacillus and is an infectious disease. The chief source of infection is the sputum and the germ enters by the respiratory tract. Pulmonary tuberculosis is most prevalent from puberty onwards.

The following statement shows the number of persons who died due to respiratory diseases from 1965 to 1972:

Year	No. of deaths
1965	216
1966	52
1967	286

1968	76
1969	46
1970	129
1971	304
1972	683

Vulnerable Diseases

There are five human diseases of this group, viz., syphilis, caused by a spirochete, two bacterial diseases, gonorrhoea and chancre; a virus infection (Lymphogranuloma inguinale) and a tropical disease, due to an unusual type of bacterium. However, two diseases syphilis and gonorrhoea are more widely prevalent in the district.

Syphilis is an infected venereal disease due to the entrance into the body of a virus or poison produced by an organism known as the Spirochaete Pallida. This disease may be congenital or acquired. It is generally communicated from one individual to another by contact. The disease is transmissible from parents to offspring.

Both the diseases are responsible for much of the blindness. If not treated in time, they produce degenerative changes of a varied character in the internal organs of the body. Gonorrhoea contributes to ill health in women, it produces sterility also. Polyandry, polygamy, ignorance, promiscuity, poverty and immoral traffic facilitate the transmission of venereal diseases. In 1973 and 1974, 51 and 42 cases of syphilis were reported from the district.

Industrial Diseases

Certain toxic materials are used or are produced, in the process of manufacture and when the conditions of work are not up to standard or even under certain other circumstances, these materials give rise to ailments which are classed as occupational or industrial diseases. No survey has been carried out so far to highlight their incidence in the district.

Deficiency Diseases

The term 'deficiency diseases' refers to all such bodily ailments that arise out of nutritional inadequacy, whether that inadequacy is caused by dietary insufficiency or as a result of various factors which interfere with indigestion absorption or utilization of essential nutrients. Among the deficiency diseases generally recognized to be due to lack of specific food factors, the most important are nutritional oedema, nutritional anaemia, xerophthalmia, night blindness, phrynoderma, Beri Beri, stomatitis, pellagra, scurvy, rickets, lathyrism and osteomalacia. Majority of the people residing in the district are undernourished and suffer from one or other diseases of malnutrition.

Goitre- Endemic goitre is extremely common in the northern tract and particularly near the Gandak river and its branches. McCarrison attributed it to contamination of water supplies and consumption of hard water due to calcium salts. Excess of fluorine in water and unbalanced diet have also been associated. Whatever may be the causes involved, one factor stands clearly that there is a state of absolute or relative iodine starvation. Therefore, an adequate supply of iodine in the diet has been recommended. Iodised salt is supplied for consumption.

Leprosy- Leprosy has been prevalent in the district since ancient times. The census of 1881 shows that there were 465 lepers in the district. There are two leprosy treatment centres functioning in the district - Kushth Sewa Ashram (a voluntary organisation) and Government leprosy Centre, Gorakhpur.

Eye Diseases

Eye diseases prevalent in the district may be classified as below:

Hereditary Eye Diseases- Micro-ophthalmic, anophthalmos, aniridia, colobomata, octopialentis, buphthalmos, etc. and various types of congenital cataracts, squints, obiotrophies and progressive myopia, etc.

Communicable Eye Diseases- Among communicable eye diseases conjunctivitis and trachoma are more common. Incidence of conjunctivitis vary with the season. Although this is an ordinary inflammation of the conjunctiva, but it can result in serious damage to eye sight. Trachoma is a chronic and contagious eye disease. It is caused by a large sized virus belonging to a typical group of chlanydozoa characterized by the formation of fallicles, papillary hyperlasion with pannus and sear formation.

Nutrition Deficiency Eye Diseases- Deficiency of vitamin 'A' leads to xerosis and keratomalacia. Keratomalacia is one of the important causes of blindness in children because the cornea and conjunctiva become dry and the eye may even melt away in a very short time.

Corneal Diseases- There are various type of corneal ulcers which lead to corneal opacities and leukoma adherants, or even staphylomates when these ulcers perforate.

Glaucoma- Glaucoma or hardening of the eyeball is another blinding disease.

Senile Cataract - This is another important cause of blindness in old people. Though the exact cause is not known certain hereditary factors, unbalanced and deficient diet and radiation from the sun may be said to be some of the causes.

MEDICAL AND PUBLIC HEALTH ORGANISATION

Organisational Set-up

The medical and public health departments of the State were amalgamated in 1948 and were placed under the combined charge of a director of medical and health services who supervised functioning of the three systems of medicine the allopathic the Ayurvedic and the Unani. In 1961, a separate directorate was created for the effective control of the Ayurvedic and Unani systems.

The chief medical officer is the head of the entire medical organisation in the district. He is assisted by three deputies - deputy chief medical officer (medical), deputy chief medical officer(health) and deputy chief medical officer (family planning).

The Nagar Swasthya Adhikari (who is the medical officer of the municipal board) is in charge of all preventive and curative work and is responsible for maintaining public health and sanitation work in the city. He is entrusted with the sanitation control of epidemics and infectious diseases, supervision of vaccination, inspection of food stuffs, and acts as the ex-officio additional factory inspector for urban areas. Besides of sanitation (removal and disposal of rubbish and nightsoil) he looks after the control of communicable diseases in the urban areas. He also acts as registrar of vital statistics. Reports of births and deaths have to be made to him within three days of their occurrence.

Hospitals

The district hospital Gorakhpur is having 245 beds for males and 18 for female patients. There are two medical officers (class I), 12 male doctors, one female doctor, three assistant surgeons and 36 nurses, 10 para medical workers and 66 non medical staff members. In 1973, 1,23,861 outdoor and 8,613 indoor patients were treated in the hospital. Facilities for radiological and pathological examinations exist and an emergency service is available at the hospital.

The women hospital, Gorakhpur is a 178 bedded hospital. It is managed by a senior medical superintendent assisted by a senior medical officer and four other doctors. In 1973, 21,494 indoor and 47,092 outdoor patients were treated.

Government T.B.Clinic

The government T.B. clinic Gorakhpur was opened in 1950 near the district hospital Gorakhpur. District tuberculosis officer is in charge of the clinic and is assisted by two medical officers. There are 2 para-medical and 19 non-medical staff members. The chief medical officer Gorakhpur is in the overall charge of the clinic.

The following statement shows number of X-Ray exposures taken laboratory investigations done and patients treated during the last three years.

Year	No. of X-Rays	No. of Laboratory investigations	No. of patients treated
1971-72	2,780	3,370	2,226
1972-73	3,184	2,896	2,100
1973-74	3,312	2,950	2,276

Eye Hospital Gorakhpur

Eye Hospital, Park Road, Gorakhpur (Sitapur branch) was started by Dr. M.P.Mehrey on February 16, 1963. A medical officer is in charge of the hospital. There are five nurses, a refractionist, an orthoptist and 22 members of non-medical staff. In 1972-73, it had 122 beds of which 50, 57 and 15 were reserved for males, females and children, respectively.

In 1972-73, the hospital organized 31 eye relief camps, in different parts of the district and treated 9,502 outdoor and 23,140 indoor patients. Cataract, glaucoma, trachoma, xerosis and myopia are the common eye diseases of the district. In addition to treatment, operations and refraction of eyes were also carried out in the camps.

The eye hospital is managed by District Eye Relief Society, Gorakhpur with district magistrate as ex-officio president. The chief medical officer, Gorakhpur and the A.D.M.(P), Gorakhpur function as the vice-president and secretary respectively. The following statement shows the number of patients treated in the eye hospital Gorakhpur during last five years:

Year	Outdoor	Indoor	Operations
1969-70	27,559	2,846	2,941
1970-71	29,491	2,916	2,968
1971-72	31,581	2,587	3,165
1972-73	32,214	2,346	3,245
1973-74	31,669	2,667	3,321

Government Leprosy Centre Gorakhpur

The government leprosy centre is situated in Geeta Vatika, near Vishnu temple, Gorakhpur. It is a part of the district hospital. It provides only outdoor treatment to the patients. It is manned by a medical officer, assisted by a doctor. There is a compounder, a technician, 27 field workers and 6 non-medical staff members, 4,552 patients were treated at leprosy centre in 1973.

Kushtha Seva Ashram Gorakhpur

In addition to government leprosy centre there is a private leprosy hospital known as Kushtha Seva Ashram. It was established in 1951, by Baba Raghav Das. There are 200 beds of which 30 each reserved for females and children. It is well equipped with modern instrument and apparatus . There are two resident medical officers and a trained staff nurse. In 1972-73, 382 indoor and 5,722 outdoor patients were treated.

The following table gives an insight in to medical facilities available in the district in 1973:

Name of the hospitals	No of beds	
	Male	Female
District Hospital, Gorakhpur	245	18
Women Hospital Gorakhpur	--	--
Police Hospital Gorakhpur	46	178
Jail Hospital Gorakhpur	24	--
N.E.Railway Hospital Gorakhpur	173	137
P.A.C.Hospital Gorakhpur	25	--
Labour Hospital Gorakhpur	13	--
I.D. Hospital Gorakhpur	10	--
D.D. Kedia Female Hospital Siswa Bazar	--	15
D.D. Singhania Hospital Siswa Bazar	10	2
Maharajganj Hospital	6	4
Nichlaul Hospital	6	4
Barhalganj Hospital	8	4
Bansgaon Hospital	6	4
Civil hospital Nautanwa	8	4
Ghughli Sugar Mill Hospital	N.A.	N.A.

Baba Raghav Das Medical College, Gorakhpur

In addition to the above hospital, there is a medical college in the district which was established in 1972.

Ayurvedic and Unani- There are 48 Ayurvedic dispensaries in the district, of which 17 are under the supervision of chief medical officer Gorakhpur and 31 are maintained by Zila parishad. Besides, there are two Unani dispensaries - Piprauli and Gopalpur in the district which are supervised by the chief medical officer. Each dispensary has on its staff a vaid or hakim, a compounder and an attendant.

Homeopathic- There are seven homeopathic dispensaries in the district of which six are managed by Zila parishad and one functions under the direct control of chief medical officer Gorakhpur. Each has a homeopath and a compounder.

The following statement shows number of patients treated in each dispensary in 1973.

Name of dispensary	Number of patients treated
Under Zila Parishad	
Bhaduri Bazar	2,044
Bamnauli	1,633
Hata Bazar	2,461
Kakrauli	4,043
Mishrauli	5,377
NaiKot	5,296
Under C.M.O.	

Primary Health Centres

There are 31 primary health centres in the district each having a dispensary, a maternity centre (with three subcentres). The sanctioned staff for each centre consists of a medical officer, a compounder, a health visitor, 4 midwives (one for the headquarters and one each for the subcentre) and two other employees. All the above centers are under the administrative control of the deputy chief medical officer (health).

Maternity and child welfare

The maternity and child health centers were established to reduce high rate of women mortality during ante- and post-natal periods and of infants (caused by the lack of proper medical aid and advice). In the past, the maternity service were rendered in the district by the Red Cross Society. Now, they have been provided by primary health centers, each primary health center has a maternity and child health center at its headquarters and three sub-centers. In 31 maternity centers, 93 sub-centers are functioning in the district. Each maternity centers is usually staffed by an auxiliary nurse and a dai but there is a health visitor in addition at the primary health centers of the block. The trained staff of these centers offer advice and aid not only at the centers but also pay domiciliary visits.

The following statement shows the numbers of delivery cases conducted during three preceding years by maternity welfare staff:

Year	By	No. of auxiliary nurses	of delivery cases	conducted by dais
1971		3,895		5,686
1972		5,502		4,803
1973		4,468		5,733

The statement No.I at the end of the chapter shows the names of maternity centres and its sub-centres in the district.

Prevention of Food and Drug Adulteration

The district medical officer of health, now, the deputy chief medical officer(health) is the licensing authority for food vending and drug distribution in rural areas of the district. The municipal officer of health is responsible for this job in the municipal areas.

The following statement shows the number of samples collected, those found adulterated and the number of cases prosecuted in the year 1972 and 1973:

Year	No.of samples collected	No.of samples found adulterated	No.of cases prosecuted
Food			
1972	450	181	112
1973	658	244	157
Drugs			
1972	79	5	5
1973	125	7	7

Vaccination

It early times the rate of mortality from smallpox was high in the district as people were averse to vaccination. But gradually people began to realise the benefits of vaccination. The Vaccination Act 1880, was enforced in the municipal areas in 1885. The vaccination is compulsory only within the municipal limit,

but it can be extended to rural areas on the outbreak of an epidemic . Mothers are invariably advised to have their children vaccinated within six months of their birth.

The municipal medical officer of health is in charge of vaccination work in the city. An assistant superintendent of vaccination assisted by sanitary inspectors, vaccination, smallpox supervisors carries out the work of vaccination in the rural areas under the overall supervision and control of the deputy chief medical officer (health). The following statement gives the number of persons vaccinated in the period 1960-1972:

Year	Total number of persons vaccinated	Number of primary vaccinations		Number of vaccinations	
		Successful	Unsuccessful	Successful	Unsuccessful
1960	89,243	72,580	921	16,663	1,326
1961	93,613	74,144	435	19,469	1,621
1962	93,518	72,841	2,156	20,677	1,485
1963	8,62,253	1,70,500	1,825	6,91,753	1,948
1964	11,51,770	1,25,970	1,320	10,25,800	2,235
1965	2,85,962	81,298	2,410	2,04,664	2,656
1966	3,43,309	1,23,058	629	2,20,251	2,172
1967	3,14,925	79,790	1,126	2,25,135	1,678
1968	2,76,732	98,384	1,288	1,78,348	2,927
1969	4,39,454	1,87,830	936	2,51,624	3,159
1970	4,34,974	1,90,581	875	2,44,393	2,672
1971	5,80,832	2,14,926	22,989	3,65,552	1,44,090
1972	4,95,832	1,83,180	13,739	3,12,652	1,20,919

National Malaria Eradication Programme

In 1956, an anti-malaria unit was established in the district as a part of the national programme in this sphere. In 1958-59, it was named as the national malaria eradication programme. The district was divided into hyper-endemic and hypo-endemic areas. During 1958-59, the hyper endemic part covering about 2 million population was covered by one and half unit-west Gorakhpur, with 4 sub-unit and west Deoria with 2 sub -unit. In 1959-60, the remaining area of the district which was categorized as hypo-endemic, was also included in the programme through a unit-south Gorakhpur, with headquarters at Gorakhpur and 2 sub-unit. Thus by 1960, the entire district was covered by the malaria eradication programme; the unit at south Gorakhpur, was comprised of an anti-malaria officer, 2 field worker and 11 other subordinate staff. For each of the sub-units, there are a senior malaria inspector, a malaria inspector, a superior field worker and 2 field workers.

There are roughly four phases through which each of the unit has to pass-preparatory, attack, consolidation and maintenance.

In the district of Gorakhpur, preparatory phase was virtually amalgamated with the already existing national malaria control programme. In the second phase, D.D.T. spray operations were carried out in all human dwellings, cattle sheds and places, where the possibility of malaria breeding mosquitoes exists at least twice a year. In 1959-60, an intensive anti-malaria campaign was launched in the district and 5,06,938 houses were disinfected. In 1962-63, the N.M.E.P. units entered in the third stage, e.g. the consolidation phase. At this stage only surveillance operations were carried out. At this stage the staff for each of the unit was an assistant unit officer, 6 to 7 surveillance inspectors, 26 to 30 house visitors, and 4 laboratory technicians. Each house visitor was allotted a population of 10-12 thousands among whom he searched the fever cases. The blood slides of the fever patients were collected and presumptive treatment was also provided. In case the laboratory test indicated the presence of malaria infection in any patient, further intensive only when it becomes part of the regular district health schemes.

The deputy chief medical officer (health), under the general control of the chief medical officer; supervises the programme in the district. The following statement shows the number of blood slides of the suspected malaria patients examined and number from 1969 to 1973:

Year	Number of blood slides examined	Number of positive cases found
1969	86,734	9
1970	69,883	NIL
1971	74,221	NIL
1972	76,105	5
1973	90,994	88

Family Welfare Planning

In order to propagate the concept of a small family commensurate with the ideal of planned parenthood, the family planning unit was established in the district in 1965. Now, there is a family planning centre attached to every primary health centre. The family planning work at the centre is supervised by the medical officer incharge of the primary health centre.

A mobile team function under the care of male doctor who performs vasectomy and a lady doctor undertakes I.U.C.D. and tubectomy work.

The following statement shows achievements in family planning work in the district from 1971 to 1974:

Year	Number of sterilization	Number of loop inserted	Distribution of contraceptives
1971-72	28,233	1,425	3,632
1972-73	13,352	623	5,840
1973-74	304	980	5,937

Diet and Nutrition

Food-grains generally consumed in the district are wheat, rice and barley at an average rate of 650 gm. per capita per day against the recommended normal average at 475 gm. Mixture of cereals called bejhar is also commonly used. The common combinations are those of wheat and gram, jowar and gram, wheat, barley and pea or gram. Millets like maize, bajra (*Pennisetum typhoides*), (*paspalum scrobiculatum*), sawan (*penicum frumentaecum*) and kakun (*penicum italicum*) are consumed by the poorer section of people. Consumption of rice both as parboiled and plain is common in the district. on account of easy and cheaper pounding of rice through machines, the indigenous hand-pounding industry has virtually become extinct. Handpound rice is at present rarely affordable only by richer people especially under medical advice. The usual method of washing rich several times with water before cooking, deprives it of the precious vitamin B quality, the deficiency being aggravated by throwing away the starch water after cooking.

Wheat is now commonly milled by the mechanically driven flour mills and nearly 40 gm. of bran in each kg. of flour which is very rich in nutritive value is wasted during milling and sieving.

Pulses mostly consumed in the district in their order of preferences are arhar (*cajanus cajon*), masur (*Lens culinare*), gram and urd (*phasiolus mungo*) and the average rate of their consumption is 60 to 70 gm. per adult per day.

The common vegetables eaten in the district are brinjal, pumpkin, gourd, cabbage, cauliflower, lady's finger, tomatoes, potatoes, radish, carrot and onion. An average of 231 gm. of vegetables per day as compared to the recommended allowance of 300 gm. is consumed in the district. The common leafy vegetables are palak (spinach), sarson (mustard leaf) and cholai (amaranthus) and the root vegetables comprise potato, shakarkand (sweet potato), radish, carrot, zamikand (yam), onion, singhara and bhasinda grown in the lakes, tanks and ponds are also consumed as vegetables. Mango, Papaya, guava, banana, water-melon, musk-melon and custard-apple are the common fruits grown and eaten by the people in the district. Apples, oranges, grapes and dry fruits which are mostly imported from outside the district are naturally costly and the average person can not afford them except under special circumstances. The number of cattle being poor in the district milk production is below the mark and butter is not available in average quantity to an adult.

The average consumption of fat and oils is 15 gm. which is very much below the recommended normal dose of 40 to 60 gm. Vegetable ghee (hydrogenated oil) as the medium of cooking is usually preferred by the people in the urban areas while mustard oil is both liked and easily procurable in the rural areas.

Meat, fish and eggs form only 12 gm. of the average diet of an adult in the district and it is much below the recommended dose of 30 gm. Mill-made sugar though not abundant, yet is available easily in the urban areas. The alternative in the rural areas being gur (jaggery) and khandsari.

STATEMENT NO. I

Maternity centres	Maternity subcentres
Bansgaon	Unuwal, Kanaicha, Bishunpur
Bahaduri Bazar	Brijmanganj, Koluhue, Phulmanhan
Belghat	Lakhuwa, Pakar, Mirpur, Malaon
Bhathat	Rampur, Bailo, Karmaha Buzurg
Brahampur	Bhakurha, Mithabel, Gajaikot
Chargawan	Saraiya, Padri Bazar, Siktaur
Compierganj	Pepegaj, Natwar, Bhaunrabasi
Dhani	Baisar, Balua, Rigauli
Derwa	Barhalganj
Gagha	Majhgawan, Bhatpar, Sukulpur
Gola	Bharoh, Chilua, Daidiha
Ghughli	Bhatauli, Harpur, Mahant, Khushahalnagar
Jangal Kauria	Doharia, Sarhari, Jaswal
Kauri Ram	Gajpur, Malaon, Jagdishpur
Khajni	Bhainsa, Asapar, Har Dahi
Khorabar	Lahsari, Raiganj, Jhangha
Laximipur	Purandarpur, Naikot, Addabazar
Maharajganj	Karmaha, Pakri Naunia, Bagapar
Mithaura	Darahta, Sakhui, Nandabhar
Nichloul	Kathari, Urwalia, Madhonagar
Pali	Gaghsara, Bharpahi, Barhya Chauk
Partawal	Shyam Deurwa, Dharampur, Bairia
Pharenda	Sohraulia Kalan, Gopalpur, Chautarwa
Painiara	Mujui, Narkatha Kalan, Mithaura
Pipraich	Unaula, Marapar, Nathua (Sonbarsa)
Piprauli	Ekla, Bhauapar, Bhati (Khoria)
Ratanpur	Nautanwa, Sheopuri, Khuria
Sahjanwa	Bhiti, Baur Dih, Bhabhsa
Sardarnagar	Chauri Chaura, Gaunar, Rampur
Siswa Bazar	Karmahi, Pakri Chaube, Siswa Khurd, Sarpur
Uruwa	Dhebra Buzurg, Araon jagdis, Malhanpar Buzurg

