CHAPTER XVI

MEDICAL AND PUBLIC HEALTH SERVICES

MEDICAL

Climate

The climate of the district, on the whole, is not very good. Many parts of the district are low-lying, swampy and water-logged. The houses, which are generally mud huts constructed from earth dug out of a hole in the immediate vicinity, are surrounded by unhealth stagnant pools which mostly form breeding places for mosquitoes. Besides, the entire district lies in a flood prone area. Major part of the district remains inundated during the rainy season for a long time. The climate of Baleshwar is encircled by a large number of water-logged swamps. Also certain portions to the north particularly Jaleshwar area which is regarded as the worst fever zone, are unhealthy. Malarial fever of a malignant type was spreading from the adjacent tracts of Midnapur in the past. In this subdivision Malaria and Filaria are endemic. The climate of the Bhadrak subdivision is however cooler and fairly healthy. The climate of Nilagiri subdivison which is a low-lying tract and surrounded by ranges of hills and forests is usually damp and unhealthy. Some portions of the hilly tract are malarious. The district which was once a malarial tract has now improved due to various Malaria Control Programmes.

Epidemics like cholera and small-pox took a heavy toll of life in the past. But owing to the operation of various public health and preventive measures their visitations are now almost under control.

Survey of Public Health and Medical Facilities in Early Times

The Baleshwar Pilgrim Hospital, the first of its kind in the district was established in 1853 with the object of affording medical relief to the pilgrims passing along the Trunk Road to Puri. It provided accommodation for 39 indoor patients (33 males and 6 females) in which an average of 6,000 patients were treated annually. Besides, there were two dispensaries, one at Baleshwar town and the other at Bhadrak which was opened in 1868. During 1890-94, there were only 8 dispensaries in the district in which the average annual number of persons treated was 21,000. Gradually the number of dispensaries excluding the Police Hospital at Baleshwar was increased to 11 of which 4 had accommodation for in-patients. Among other medical institutions

of the district, mention may be made of the Pilgrims's Lodging House Fund, which contributed to the pay of the Civil Hospital Assistants in charge of the dispensaries at Chandbali and Jaleshwar.

Prior to establishment of these institutions, there probably existed no public hospitals or dispensaries in the district. Perhaps no principles of hygiene save certain rigid religious practices were known to the people. Public health measures as known today did not exist.

Infectious diseases like small-pox and cholera were generally attributed to the wrath of the village deities and their propitiation through various rites constituted the only measure for getting rid of them. No medicine was ordinarily given to the patient.

From remote past the Ayurvedic system was popular among the people. The Vaidyas and Kavirajas, the chief exponents of this system used to carry on their profession as a family creed. Due to lack of state patronage and after the introduction of the allopathic system their influence gradually declined.

Despite the medical facilities within easy reach the local people even today take recourse to the use of indigenous herbs and plants containing therapeutic properties.

In 1907-08, as recorded by Cobden Ramsay, there was one dispensary in the ex-state of Nilagiri which provided accommodation for indoor patients. The dispensary was in charge of a Medical Officer with the qualification of an Assistant Surgeon.

Vital Statistics

A systematic collection of vital occurrences throughout the district began from 1892 under the Bengal Births and Deaths Registration Act, 1873 (Act IV, 1873). The primary reporting agency under this Act, in the rural area was the Chowkidar who used to collect information about vital occurence during his rounds in villages and reported them at the police-station on weekly or fortnightly parade days. The Thana officer consolidated the reports thus recorded for a month and then sent monthly returns to the District Health Officer. The District Health Officer sent the consolidated returns to the Director Health Services. But practicaliy this work suffered a great deal at the hands of the Chowkidars who deemed it as an additional work beyond their legitimate duty. Inadequate penal provision both for the collecting and reporting agencies also aroused little consciousness about

their duties in this direction. The Thana Officer, busy on ever-increasing law and order problem hardly checked the reports furnished by the Chowkidar. The entire structure of vital statistics was therefore, based on what was reported by the Chowkidar, an illiterate and low-paid person, and the result was admittedly far from correct. The transfer of Chowkidars to the pay-roll of the Grama Panchayat caused further setback to the system. After this transfer, the attendance of the Chowkidars at the weekly parade in Thanas fell considerably, causing still greater default in reporting of vital statistics. After the abolition of Chowkidari System in 1965, various attempts were made for effective collection of the information through the Orissa Grama Panchayat Act, 1964. Subsequently the State Government passed the Orissa Grama Rakhi Act, 1967 on the 29th July, 1967 and the Orissa Grama Rakhi Rules, 1969 on the 11th May, 1969, under which the Grama Rakhis, besides other duties, are required to report the births and deaths which occur within their jurisdiction to the officer in charge of the respective police-stations at an interval of 15 days. But in urban areas the registration of births and deaths are done by the sanitary staff of the local bodies.

The collection and reporting of these events were slightly better in the towns of Baleshwar and Bhadrak. There was a municipality for the Baleshwar town and a Notified Area Council in Bhadrak. The vital statistics for Baleshwar town were available from 1951 and those for Bhadrak town were reported from 1959. In these two towns, the vital occurrences were collected by the health staff of the municipality and Notified Area Council who sent the monthly returns to the District Health Officer. On receipt of the monthly reports from the Thana Officer, and the municipality and the Notified Area Council, the District Health Officer compiled and forwarded monthly report of births and deaths to the Director of Health Services, Orissa, for compilation of state figure.

The Registration of Births and Deaths Act, 1969 (Act No. 18 of 1969), and the Orissa Registration of Births and Deaths Rules, 1970, have been enforced in the district with effect from 1st July, 1970. The Health Officer, or in his absence, the Executive Officer in the urban areas, and the Thana Officer in the rural areas are appointed as the Registrars. The Chief District Medical Officer and the Assistant District Medical Officer (P. H.) act as the District Registrar and the Additional District Registrar of Births and Deaths respectively while the Director of Health Services, Orissa acts as the Chief Registrar. The responsibility to make reports about the births and deaths within a stipulated time devolves on the head of the

house or household. The Act provides for penalties of fairly a nominal amount in a graduated scale for the period of delay or failure to report on the part of the reporting agency. Besides, different officers in charge of various institutions like hospitals, hotels, running trains, buses, etc., are responsible to notify about births and deaths. The vital statistics for ten years from 1976 to 1985 are furnished in Appendix 1 of this chapter. These figures offer opportunity for undertaking prognosis relating to the trend of population increase and standard of health in the district.

The figures shown in Appendix II of this chapter relates to the principal causes of death for the period 1976 to 1984. But such statistics relating to an earlier period (1951—61) is furnished in the following table with a view to providing an approximate picture for scarcely any reliance can be placed on the classification made by the Chowkidar, who having possessed no medical knowledge is apt to regard fever as a general cause of death.

State/ District	Cholera	Small-pox	Fever	Dysentery and Diarrohea
(1)	(2)	(3)	(4)	(5)
Orissa	34,440	62,978	13,12,573	1,34,096
Baleshwar	3,168	2,216	1,14,852	2,965

State/ District	Respiratory disease	Wounds and accidents	Other causes	Total
(1)	(6)	(7)	(8)	(9)
Orissa	72,409	33,547	6,33,498	22,83,541
Baleshwar	995	3,081	34,062	1,61,339

The comparative percentage of mortality due to cholera, small-pox and fever (chiefly malaria) in the district as well as the state during the period 1951—60 is furnished below:

State/District	Cholera	Small-pox	Fever
(1)	(2)	(3)	(4)
Orissa	1.51	2.76	57.48
Baleshwar	1.96	1.37	71.19

These figures indicate that Baleshwar was then under the strong grip of these diseases.

Diseases common to the district

Fever

The term fever includes a number of diseases having their superficial symptom of a rise in the normal body temperature. It is probably the largest possible killer in Baleshwar district. During the period 1951—60, the total number of deaths due to fever is recorded at 114,852. People in the district suffered greatly from fever which accounted for 71.19 per cent of total mortality during the past decade. Incidence of different kinds of fever, such as malarial fever, filarial fever, enteric fever, viral fever, fever due to influenza, etc., is common. It is apparent from the statistics given in Appendix II of this chapter. Although incidence of fever is generally highest in the district, gradually it tends to decrease during the later years. The largest death toll due to it in the recent past was 13,781 in 1975.

Malaria

Malaria, among the various types of fever is common in the district. The entire district lies in a flooded area and major part of it is inundated during rainy season for a long time. It has also an unhealthy and malarial climate. The interior part of the district which is hilly has also an equally unhealthy climate. In 1921, a severe type of malaria visited the district causing death to a large number of persons. Deaths from malarial fever are recorded all the year round. The number of deaths from malaria generally swell up in the rainy season. During the period from 1951—60 a total number of 579,424 malaria cases were recorded to have been treated in the hospitals and other medical institutions in the district. The attendance of such patients at hospitals has, however, gone down from 1958 onwards. Gradually its endemicity has been greatly reduced on account of various malaria control programmes. It is evident from the statistics in Appendix III. The number of malaria patients treated in all the hospitals and dispensaries from 1980 to 1985 is decreasing. In the recent past in 1984-85 the incidence was 29,985 in the district but only 2 persons died from malaria.

Filaria

Filariasis also commonly occurs in the district. A large number of persons are annually affected by filarial fever. The incidence of filariasis, even today is abnormally high which is evident from the figures given in Appendix III. The number of patients

treated in all the medical institutions from 1980 to 1985 has increased with slight variation in the year 1981. From 1980 to 1984 not even a single person is recorded to have died from filaria disease. In the year 1984-85 only one person is reported to have died. Now filariasis, the most common epidemic disease has almost been checked.

Typhoid

The incidence of typhoid is also high which is evinced from the figures in Appendix III and the figures are undoubtedly on the increase except in the year 1984-85. The greatest mortality was in the year 1982 when 43 persons died. People of Baleshwar district suffer greatly from typhoid every year but the number of deaths has steadily decreased.

Cholera

From time to time there were severe epidemics of cholera in the district. Before construction of the railway, it invariably made its appearance along the Trunk Road together with the great stream of pilgrims travelling to Puri. It was once ranked first among the scourges of epidemic disease in the past and the mortality caused by it was appalling. Cholera was prevalent in the district even during the period from 1951—1960. Deaths during 1955 and 1960 were negligible being only 69 and 35 respectively. The greatest mortality was in the year 1953 when 718 persons died. From November 1952, number of cholera deaths began to be reported in greater number and in January, 1953 the highest casuality in any month during the decade was recorded, being 280. Deaths, however, fell down after April and the subsequent periods up to October, 1956 did not notice any great mortality, which was again on the increase from November, 1956 till January, 1957. The disease was present in almost all the months of the decade and its general tendency was to rise during November-January and then subside gradually. Among all months of the year least number of casualities has been in the month of September. The figures shown in Appendix III relating to the principal causes of death for the period 1980—1985 are undoubtedly on the decrease. Only one person is reported to have died in cholera during the five years. Owing to elaborate preventive measures taken against the epidemic these days which is described later in this chapter, cholera has been checked in the district to a great extent. Not a single cholera case was reported in the district during 1983-84 and 1984-85.

Small-pox

The district seems to have suffered greatly from small-pox in the past. Small-pox also visited the district regularly during the past decade 1951—60 but it took only a few lives. In the year 1951 the

incidence was fairly large and the total number of persons died from small-pox was 1,029. Its severity was felt in early part of the year but from July it began to subside. In 1958 also 571 persons died out of which 120 deaths were recorded during April alone. During the years 1958 and 1960 it caused comparatively less number of deaths. The incidence of small-pox is also not so great which is evinced from the figures in Appendix III. During the period from 1980 to 1985 not a single person died of small-pox. Due to effective preventive measures taken by the World Health Organisation against the formidable disease it is claimed to have been eradicated, not only in India, but also throughout the world.

Yaws

Yaws, a malignant type of skin disease is also commonly found among the tribal people. It seldom assumes any formidable proportion. But its incidence is almost completely checked in the district owing to the anti-yaws campaign undertaken in the past.

Leprosy

The incidence of leprosy is also high in the district. Nowadays leprosy patients are found in large numbers mostly in the pilgrim centres and towns. At present its treatment is conducted in the existing hospitals and dispensaries. The anti-leprosy activities undertaken in Baleshwar district are dealt with separately later in this chapter.

Tuberculosis

It was one of the principal diseases of the district in the past. From the statistics furnished in Appendix III it is apparent that about 2 to 3 thousand persons were annually affected by this disease. But during the period from 1980—1985 only 164 persons died of tuberculosis. The Government activities undertaken towards controlling the disease has been described later.

Dysentery and Diarrhoea

In common with the inhabitants of other parts of Orissa people of Baleshwar district also suffer greatly from diarrhoea and dysentery. But the number of deaths attributed to these affections was not great. The cause of these diseases was the result of consumption of impure drinking water and the general ignorance of the people. The figures in Appendix III reveal that the annual number of dysentery patients treated in the district during 1980—1985 is increasing.

Other Common Diseases

Fevers, cholera, small-pox, dysentery, diarrhoea, elephantas and infirmities were the principal diseases of the district in the past. But the impact of science on society in general and medical science in particular, has changed the situation. Incidence of malaria, small-pox and cholera which once played havoc in the district are now almost put under control. Among other diseases common to the district mention may be made of influenza, anaemia, malnutrition, respiratory diseases, heart diseases, skin diseases, tetanus, cancer, etc.

Public Hospitals and Dispensaries

Administrative set-up

There was a good dispensary with indoor ward attached at the headquarters of the ex-state of Nilagiri. The dispensary was in charge of an Assistant Surgeon. He was assisted by a Civil Hospital Assistant, who also looks after vaccination work and a qualified female Civil Hospital Assistant for the female patients. After the merger of the ex-state of Nilagiri, the administrative control of the dispensary was vested with the Civil Surgeon, Baleshwar. The Health Officer was in charge of the Public Health administration. Under the present set up the Civil Surgeon has been re-designated as the Chief District Medical Officer. Under him there are three Assistant District Medical Officers, one in charge of medical, the other in charge of Family Welfare and the third in charge of Public Health Organisations of the district. In addition, the Chief Medical Officer is assisted by a number of doctors including lady doctors and other technical and non-technical staff. Besides, his normal routine duties relating to the administration of medical and public health activities in the district, the Chief District Medical Officer also functions as the District Registrar under the Registration of Births and Deaths Act, 1969. He is the local food authority under the Prevention of Food Adulteration Act, 1954.

In 1949, there existed about 27 medical institutions. With the establishment of new institutions, chiefly the Primary Health Centres in the remote rural areas their number gradually increased. By the end of 1985 there were in the district 9 hospitals, 31 dispensaries, 19 Primary Health Centres, 10 Medical Aid Centres, 22 Subsidiary Health Centres, 1 First Aid Centre, 1 Mini Health Centre, besides one private hospital and 4 other institutions. Thus numerically it rose to over nearly three times the number existing in 1949. A list of such institutions with their date of establishment, number of staff, bed strength, etc., is furnished in

Appendix IV. Detailed descriptions relating to the District Headquarters Hospital, the Subdivisional Hospitals, the T. B. Hospital and the St. Vincent Hospital (private) are given separately. Of these institutions, two Railway Health Units located at Baleshwar and Bhadrak are managed by the South Eastern Railway Authority, and the Police hospital and the Jail hosoital at Baleshwar are managed by the Home Department of the State Government. Besides, the Gopabandhu Dispensary of Nayabazar at Baleshwar is being managed by the Baleshwar Municipality and the E. S. I. Dispensary at Baleshwar is under the control of the Labour Department of the State Government. Moreover the Lady Liew's Maternity and Child Health Centre of Baleshwar town is managed by the Health and Family Welfare Department of the State Government. There is a privately managed Nursing Home at Baleshwar.

District Headquarters Hospital, Baleshwar

A charitable dispensary known as Raja Shyamananda De Charitable Dispensary was founded by Rai Bahadur Raja Baikunthanath Dey in 1874. In 1894 a female outdoor was attached to this dispensary named as Rani Sreemati Female Charitable Dispensary. Both the dispensaries were located in the Barabati area of Baleshwar town. In 1905, Growse, the then Commissioner of Orissa Division amalgamated both the institutions and renamed it as Growse Raja Shyamananda De and Rani Sreemati Hospital. This institution was run by funds made available by the District Board and the Baleshwar Municipality with the assistance from the Government. An Assistant Surgeon of the State Medical Cadre and a lady doctor of Government Subordinate Medical Cadre were posted there by the Government. The Baleshwar Municipality provided one Sub-ordinate Medical Officer for the institution. In 1944, it was takenover by Government and was renamed as Government District Headquarters Hospital, Baleshwar. The hospital moved to its new building on 15.8.1956. After that much improvements to the hospital building have been effected and its staff augmented. Then the hospital was in charge of a Civil Surgeon and was well provided with medicines and surgical equipments. In 1961, it contained 86 beds for male and female patients. In keeping with the increasing demand and popularity, the staff strength as well as the number of beds of the hospital increased from time to time. At present it provides accommodation for 76 male and 70 female patients.

The Assistant District Medical Officer (Medical) under the overall supervision of the Chief District Medical Officer is in charge of the institution. He is assisted by as many as 33 medical

officers including 11 specialists, one in each of the branches of medicine, surgery, Obst. & Gynaecology, paediatric, orthopaedic, pathology, radiology, skin and V. D., E. N. T., eye and anaesthesia. The present staff of the hospital, besides the number of doctors mentioned above, constitute 6 pharmacists, 26 nurses and 7 other technical personnels. The hospital is mainly divided into, (1) a well equipped operation theatre, (2) a surgical ward, (3) a medicine ward, (4) a labour ward, (5) a paediatric ward, (6) an infectious ward, (7) post-mortem room and (8) administrative block. The out-patient department is held in a separate block attached to the hospital. The hospital is provided with a pathological laboratory, a X-ray machine a deep X-ray therapy and a Blood Bank. Attached to it are, a leprosy clinic, a T. B. clinic, a F. P. clinic, a dental clinic and a venereal disease clinic. Besides, anti-rabic and cancer treatment facilities are made available here. The dental clinic is in charge of a Dentist.

Ambulance service is available at Baleshwar and Bhadrak to the patients on payment. Attached to the hospital is an Auxiliary Nurse and Midwifery Training Centre with training facilities for twenty students in Auxiliary Nurse Midwifery course which extends over a period of two years. Hostel accommodation is also available for the trainees.

The following table indicates the number of in and out patients with daily average treated in the hospital during the years 1980 to 1985.

Year	Indoor	Outdoor	Daily average	
			Indoor	Outdoor
(1)	(2)	(3)	(4)	(5)
1980 ..	9,131	2,13,808	152	584
1981 ..	9,992	2,53,930	161	696
1982 ..	11,217	2,54,085	160	696
1983 ..	10,937	2,80,567	175	768
1984 ..	12,383	2,86,726	178	785
1985 ..	13,424	2,89,039	187	792

Subdivisional Hospital, Bhadrak

In 1862 an allopathic hospital at Bhadrak was founded on donation by Bhagat, a philanthropic person of Cuttack. Then it was managed by the District Board, Baleshwar. The hospital was in charge of an Assistant Surgeon. Gradually developments

were made through the assistance of philanthropic persons and the government. For water supply a deep tube-well with pipe line connection was made out of funds donated by Bhuyan Bhaskar Chandra Mahapatra. The institution was provincialised in 1944 and was renamed as Subdivisional Hospital, Bhadrak. Subsequently, the number of beds and other medical facilities were increased and a new operation theatre, maternity ward, maternity centre and Family Planning Centre, etc., were added to it. In 1961, it had 26 beds for indoor patients. At present the institution provides accommodation for 25 male and 25 female patients.

It is directly managed by the Subdivisional Medical Officer under the supervisory control of the Chief District Medical Officer, Baleshwar. He is assisted by 8 Mddical Officers including 4 specialists, one in each of the branches of medicine, surgery, Obst. and gynaecology, and orthopaedic. In addition there are 3 pharmacists, 7 staff nurses, 2 midwives and many other technical and non-technical personnel. It accomodates 50 patients and the beds are allocated into separate wards like surgical, medicine, paediatric and infectious. In addition, there exists a separate operation theatre, a pathological laboratory, a post-mortem room, an out-patient department and an administrative block. Facilities for X-ray and anti-rabic treatment are also made available to the patients. Besides, T. B. clinic and Family Planning clinic are attached to the hospital.

The following table gives the number of patients treated and their daily average attendance during the years 1980 to 1985.

Year	Indoor		Outdoor	
	Patients treated	Daily average	Patients treated	Daily average
(1)	(2)	(3)	(4)	(5)
1980 ..	6,963	95	1,24,168	340
1981 ..	6,854	111	1,22,363	335
1982 ..	6,575	100	1,16,490	319
1983 ..	6,891	167	1,76,636	484
1984 ..	8,280	157	1,53,245	353
1985 ..	8,734	148	1,49,083	408

Subdivisional Hospital, Nilagiri

During 1860 a dispensary with indoor accommodation was started at the headquarters of the ex-state of Nilagiri in charge of an Assistant Surgeon. After merger with Baleshwar district the dispensary was converted to a hospital in 1949. Then it assumed the status of the Subdivisional Hospital. In 1961 it had accommodation for 34 patients only. No tangible improvement seems to have been made to the hospital since its inception except the maternity block which was added to it in 1957.

The Subdivisional Medical Officer is in charge of the hospital and works directly under the control and supervision of the Chief District Medical Officer, Baleshwar. He is assisted by one Assistant Surgeon, one lady Assisatant Surgeon, two Pharmacists, six staff nurses and a number of technical and non-technical personnel. In addition to the above staff permanently posted to the hospital there are two specialists concerning to Medicine and Gynaecology departments.

The hospital consists of an operation theatre, an out-patient department, a post-mortem room, a labour room, a maternity ward, medical ward, a surgical ward and an infectious ward. The hospital provides forty beds which is eqally divided between male and female patients. There are also an X-ray machine and a well equipped pathological laboratory. Attached to the hospital are a leprosy clinic, a family planning clinic and a T. B. clinic. Facility for the treatment of anti-rabic cases is also available here. Besides, there is an oral polio vaccine centre in the hospital. The following figures indicate the number of in and out-patients treated in the hospital with their daily average during the years 1980-85.

Year	Number of indoor patients treated	Number of outdoor patients treated	Daily average	
			Indoor	Outdoor
(1)	(2)	(3)	(4)	(5)
1980 ..	2,218	90,731	26	248
1981 ..	2,466	99,463	35	272
1982 ..	2,938	1,09,572	43	303
1983 ..	3,253	99,867	53	268
1984 ..	3,751	98,787	51	271
1985 ..	3,784	90,133	47	247

Lady Liew's Maternity and Child Health Centre, Baleshwar

The Lady Liew's Maternity and Child Health Centre was established at Baleshwar in 1940. It was managed by the Red Cross Society till 1970. From 1971, the management was taken over by the State Government. Under the supervision of the Chief District Medical Officer, Baleshwar, one Lady Assistant Surgeon of District Headquarters Hospital is in charge of the centre. She is assisted by two auxiliary nurse midwives, one Dhai, one Aya and other non-technical staff.

Services are offered by the centre through clinical method. Antenatal and postnatal cases are examined in the centre and are given required treatment and advice. Antenatal care, delivery and postnatal care including immunisation nutritional anaemia and Prevention against blindness are done by the Lady Health Visitor, A. N. Ms. and Dhai at the door-stepin the municipal area.

The following table shows the year-wise achievement of the Lady Liew's Maternity and Child Health Centre during the five years 1981 to 1985.

Year	Number of antenatal cases examined	Number of deliveries conducted	Number of postnatal cases examined	Number of oral contraceptive tablets distributed
(1)	(2)	(3)	(4)	(5)
1981 ..	2,895	108	337	301
1982 ..	2,896	73	268	201
1983 ..	2,535	81	168	N. A.
1984 ..	2,313	97	324	N. A
1985 ..	2,902	99	417	N. A.

(Contd.)

Year	No. of pholi-pher tablets distributed to expectant and nursing mothers	No. of T. T. given to expectant mothers	No. of children examined	No. of children given Vita-A solution	No. of children given D. P T.
(1)	(6)	(7)	(8)	(9)	(10)
1981 ..	1,587	1,480	1,022	9,235	1,923
1982 ..	1,159	644	1,323	1,500	589
1983 ..	2,586	976	1,281	2,000	823
1984 ..	11,680	1,294	1,250	6,000	1,083
1985 ..	15,000	894	1,169	7,000	765

Notes: T. T. means Tetanus Toxoid Injection and D. P. T. means Diptheria, Pertussis, Tetanus Injection

Private Hospitals and Nursing Homes

No authentic statistics is available regarding the number of general practitioners and specialists working in urban as well as in rural areas of this district. But there are a number of private practitioners of different systems practising both in rural and urban areas. Among the private hospitals mention may be made of the St. Vincent Hospital, Baleshwar. A short account of the institution is given below.

St. Vincent Hospital, Baleshwar

The St. Vincent Hospital was established at Baleshwar town in 1978 by a Christian Mission. It is the first institution of its kind in the district. At present it has 30 beds. These beds are equally divided between the male and female patients. The hospital is in charge of one Medical Officer who is assisted by one staff nurse and six non-technical personnel.

There are some Nursing Homes in the urban areas of the district.

Ayurvedic and Homeopathic Institutions

In the past the Kavirajas who practised the Ayurvedic system of treatment were popular in the district. But the development of the system was retarded to a considerable extent after the introduction of the Allopathic system. The Homeopathic system of treatment in the district came at a later stage. Now the Ayurvedic and Homeopathic systems are becoming popular under the patronage of the State Government. These systems of treatment are less expensive. The ayurvedic and homeopathic institutions in the district are directly managed by the Director of Indian Medicines and Homeopathy, Orissa, Bhubaneshwar.

Ayurvedic Institutions

At present there are 25 Ayurvedic dispensaries functioning in the district. Out of these dispensaries, one is located at Baleshwar and the rest are in the rural areas. Each of these institutions is in charge of an Ayurvedic Medical Officer and an Ayurvedic Distributor. Besides, two Ayurvedic Assistants are also functioning at Baleshwar and Sartha. The number of patients treated in these dispensaries during 1985 was 3,63, 261. The system of treatment has received an increased patronage from the public. Moreover, the number of patients attending these dispensaries for treatment is gradually increasing day by day. The date of establishment and location of these Ayurvedic dispensaries are given in Appendix V of this Chapter.

Homeopathic Institutions

The district had 36 Government Homeopathic dispensaries in 1985. Out of these, one dispensary is located at Baleshwar town and the others are in the rural areas. The staff of each institutions chiefly constitute one Medical Officer and a Homeopathic Assistant. The number of patients treated in these dispensaries during 1985 was 10,05,305. The Homeopathic system of treatment is gaining popularity in the district and the number of patients is increasing day by day. The date of establishment and location of these institutions are given in Appendix VI of this Chapter.

Unani Institutions

An Unani dispensary is functioning at Bhadrak since 1971. The dispensary is in charge of one Unani Medical Officer who is assisted by a pharmacist and a distributor. The number of patients treated in the Unani dispensary during 1985 was 13,241. Besides, the Regional Research Institute on Unani medicines was established at Bhadrak in 1979 by the Government of India.

PUBLIC HEALTH

Sanitation

Organised and systematic schemes of sanitation were practically unknown outside the town of Baleshwar till the beginning of the present century. Writing in 1877, about the town of Baleshwar Sir William Hunter remarked "Till lately no attempt was made at sanitation. Balasore town contains no fewer than 11,000 tanks not one of which can be said to be in a wholesome state. The tanks are the receptacle of every sort of filth, fluid and solid". Since that time the sanitation of the town had been greatly improved. Tanks had been cleared out, drains opened and conservancy rules enforced. The drainage of the town is good, all surplus water

finding a ready exit, and these natural facilities had been aided by the introduction of an extensive system of drains and by the removal of the old drains which terminated in cess-pools.

In the interior, the state of affairs is different. Wells had been sunk and tanks cleaned, but there has been no serious attempt to improve the conditions prevailing in the Mufasil villages. Apathy of the people and the unwholesome habits to which they are rooted render the task of village sanitation on any appreciable scale most difficult. The villages abound in filthy pits and hollows containing water of the foulest character and full of decaying vegetation which constituted a standing menance to public health. The houses throughout the district were built of mud dug up from the vicinity; and the result was that in the neighbourhood of almost every hut or house there was a dirty pit, filled to overflowing with water in the rainy season, and the receptacle of every description of filth.

In course of time the people have become more conscious about their health and sanitation through mass education and propaganda by government agencies. Since independence the government have also implemented a number of successful schemes to maintain a healthy atmosphere by taking protective and curative measures both in urban and rural areas of the district, particularly in sinking a large number of tube-wells for supply of pure potable water.

Administrative set-up in urban and rural areas

There existed, at different times different organisational pattern for the maintenance of public health and sanitation in the district. Since 1949, the Health Officer, under the control of the Civil Surgeon, Baleshwar was in charge of the public health administration. According to the present set-up, the Assistant District Medical Officer (P. H.) is directly responsible for the public health affairs in the district and is under the overall control and supervisory authority of the Chief District Medical Officer.

In the urban areas sanitation is managed by the municipal or Notified Area Council authorities. In the Baleshwar municipality, one Health Officer, three Sanitary Inspectors and four Disinfectors have been posted. The Assistant District Medical Officer (P. H.), Baleshwar is in charge of the Bhadrak Notified Area Council as Health Officer. There are one Sanitary Inspector and one Disinfector to look after the sanitation work. Besides, a Leave Reserve Sanitary Inspector is deputed from the District Headquarters Hospital to assist them. The sanitation of Jaleshwar, Soro and Basudebpur

Notified Area Councils is managed by the Sanitary Inspector of the concerned Primary Health Centres. These officers work under the Assistant District Medical Officer. Separate full and part-time conservancy staff are maintained by the respective municipality and Notified Area Councils.

During big fairs and festivals, temporary conservancy staff are usually appointed to cope with the extra burden of work. There are full-time Food Inspectors for food sanitation in both urban and rural areas of the district.

The sanitation in rural areas is managed by the Medical Officer of the Primary Health Centre. He works under the supervision of the Assistant District Medical Officer (P. H,) and the Chief District Medical Officer and is assisted by three Sanitary Inspectors, four special Cholera Workers and four Vaccinators. Under various health schemes and programmes, different categories of public health staff are working in rural and urban areas for maintenance of health and sanitation in the district.

Besides, one Medical Officer, Mobile Field Hygiene Unit; one Assistant Health Officer and one Medical Officer, Cholera Combat Team; are posted in the district.

Activities of Health and Sanitary Organisations

Prevention and control of main communicable diseases, provision of protected water supply, drainage and performance of various other functions like slum clearance, etc., broadly constitute the activities of the Health and Sanitary organisations. Brief accounts of different programmes for the maintenance of health and sanitary conditions in the district are furnished below.

T. B. Control Programme

Under the supervision of the Chief District Medical Officer, the District Tuberculosis Officer is directly in charge of the District T. B. Control Centre. He is assisted, besides the non-technical staff, by an Assistant Surgeon (Specialist), one Treatment Organiser, two Male Health Visitors, a Laboratory Technician and an X-ray technician. In the preventive wing, the B. C. G. team consists of a team leader and 7 technicians. The total number of beds provided in the centre is 18. It is provided with 6 observation beds and 12 isolation beds for the treatment of indoor and outdoor patients. T. B. Clinic has been merged to the T. B. Control Centre and both treatment and curative facilities are made available here. In the T. B. isolation ward some cases are admitted for the period of two to three months. The B. C. G. team undertakes testing and B. C. G. vaccination given to infants through all Primary Health Centres as a preventive.

Till July 1986 there were 45 T. B. centres in the district. Besides, all Primary Health Centres, Subdivisional Hospitals and dispensaries of the district are also taking part in the programme to give full coverage to the rural population for diagnostic and treatment of T. B. patients.

To intensify case detection and to ensure community participation, sputum case finding survey camps are held from time to time, involving community leaders, Block level health staffs by way of individual contacts, film shows, message through pamphlets and playing of pre-recorded cassettes containing different aspects of the programme.

Refresher course for Medical Officers of perepheral units and general practioners was organised during 1985 to make them acquainted with different programme procedures.

The table given below indicates the activities of T. B. Control Programme since 1980 to 1985.

	Case detection				
Year	Sputum +Ve	X-ray +Ve	Ext. pul.	Total	B.C.G. vaccination
(1)	(2)	(3)	(4)	(5)	(6)
1980	330	476	186	992	67,240 (0—20 years)
1981	423	434	196	1,053	70,611 (0—20 years)
1982	431	558	193	1,182	53,436 (0—20 years)
1983	580	1,051	341	1,972	46,010 (0—20 years)
1984	789	1,063	417	2,269	52,520 (0—20 years)
1985	909	1,424	480	2,813	39,129 (0— 4 years)

National Malaria Eradication Programme

The Baleshwar unit of the National Malaria Control Programme was started in the year 1954 and the scheme continued as such till 1958. Generally insecticidal spray and other anti-malaria measures were taken under the programme. The incidence of the disease was reduced considerably. In 1958, the National Malaria Control Programme was converted into the National Malaria Eradication Programme and under it both insecticidal

spray and surveillance work were carried out extensively in the district. In 1960, the incidence of malaria was reduced to a great extent and some portions of the district was kept under the maintenance phase and the other areas where malaria positive incidence was still prevalent, was kept under the consolidation phase with the provision for focal spray.

For efficient implementation of the scheme and to render immediate services to the people, a modified plan of operation was introduced in 1978. Under the programme the district achieved 33 per cent reduction in malaria incidence in 1978. Still there are some Community Development Blocks, namely, Oupada, Berhampur and Baliapal which are endemic for malaria.

In view of the detection of falciparum malaria, six Community Development Blocks in the district, viz., Bhograi, Jaleshwar, Baliapal, Basta, Nilagiri and Oupada have been taken up for the intensive measures by W. H. O.

The District Malaria Officer is directly in charge of the programme. He works under the control of the Chief District Medical Officer and is assisted by two Assistant Malaria Officers in the management of office and field works. The District Malaria Officer supervises the activities of his sub-ordinates and issues technical instructions.

The Medical Officer of each Primary Health Centre in the district mainly supervises all the activities of the National Malaria Eradication Programme in his area in addition to his other duties and issues technical instructions. The laboratory technician daily examines about 50 to 60 blood slides and maintains the concerned records, charts, graphs, maps, etc. The Surveillance Inspector supervises the work of the surveillance workers, who visit every house at an interval of about 15 to 30 days to search out fever cases within their areas. They also conduct treatment when malaria-positive cases are discovered. The superior and inferior field workers attached to the laboratory assist the technician in his work. The temporary workers conduct spray operation in the areas under the attack phase. The area under the attack phase is served annually with two rounds of D. D. T. spray. Similarly in the area included under the consolidation phase regular surveillance is carried out and focal spray planned. The Community Health Volunteers are appointed for every 1000 population in the district to give presumptive treatment to all fever cases and to collect blood slides for examination. For better treatment of malaria, the Drug Distribution Centres are

also opened in the villages. In each village there is well-known village member who has been entrusted to give a single dose of presumptive treatment to all fever cases when required by the people.

The number of staff engaged for the implementation of the programme, except the ministerial and other non-technical personnel, is furnished below.

Name of staff		Number
District Malaria Officer	..	1
Assistant Malaria Officer	..	2
Surveillance and Basic Health Inspector	..	49
Surveillance and Basic Health Worker	..	199
P. H. C. Medical Officer	..	19
Laboratory Technician	..	20
Superior Field Workers	..	2
Inferior Field Workers	..	5

Besides, a good number of superior and inferior field workers are temporarily engaged as per requirement.

The activities of the unit during 1980—85 are given below.

Year	Under Surveillance			
	Blood Slides		Positive cases	
	Collected	Examined	Detected	Treated
(1)	(2)	(3)	(4)	(5)
1980 ..	2,49,385	2,49,385	8,502	7,514
1981 ..	2,30,259	2,30,259	5,451	4,930
1982 ..	2,29,733	2,29,733	4,937	4,459
1983 ..	2,51,512	2,51,512	5,658	5,321
1984 ..	2,34,408	2,34,408	3,379	3,242
1985 ..	2,15,656	2,15,656	2,661	2,542

During the above period, there is a declining tendency in the positive case rate since 1984.

The table below gives the details of insecticidal spray undertaken during the years 1982 to 1985.

Year	No. of houses sprayed	No. of population projected (in lakhs)
1982 ..	1,94,840	8.6
1983 ..	2,34,045	8.10
1984 ..	2,78,064	12.7
1985 ..	84,205	3.6

National Filaria Control Programme

During the year 1971-72, two National Filaria Control Programme units were established at Baleshwar and Bhadrak to control transmission of filaria in these towns. According to the instructions of the Government of India the activities of the Programme are confined to the urban areas only. Further two Filaria Clinics have been established during 1984-85 at Baleshwar and Bhadrak and are attached to the National Filaria Control Programme. The activities undertaken by the units under the Programme include anti-larval operation to check the rising trend of mosquito population by using various larvicides and treatment of micro-filaria carriers and disease manifestation cases.

The Health Officer of the Baleshwar Municipality is in charge of the National Filaria Control Programme and the Filaria Clinic at Baleshwar. The Medical Officer of Bhadrak National Filaria Control Programme is in change of the N. F. C. P. unit and the Filaria Clinic at Bhadrak.

The total strength of the principal staff entertained in the district for implementation of the scheme are four Filaria Inspectors, five Superior Field Workers and two Insect Collectors.

In these two towns anti-larval measures are undertaken to reduce the density of vector mosquitoes for filariasis. To assess the impact of anti-larval operation mosquito collection, mosquito dissection, etc, are being made and infection rate, infectivity rates are assessed. Night blood survey is conducted to detect the micro filariasis and disease manifestation cases for treatment of the same.

The tables in the next two pages show the achievements of these two units and clinics made under the scheme during the years 1981 to 1985.

N. F. C. P., Baleshwar Unit and Clinic

Year	O. M. H. D. of C. Fatigan	Mosquito infection rate	Mosquito infectivity rate	Blood slides collected and examined
(1)	(2)	(3)	(4)	(5)
1981 ..	34.8	..	..	543
1982 ..	38.8	4.3	..	1,462
1983 ..	39.7	0.8	..	541
1984 ..	37.7	..	..	..
1985 ...	44.8	3	..	711

Year	Blood slides +ve for M. F.	M. F. rate	Disease rate
(1)	(6)	(7)	(8)
1981	14	2.58	17.5
1982	26	1.7	7.5
1983	7	1.2	22.7
1984	...	...	..
1985	19	2.6	22.5

N. F. C. P., Bhadrak Unit and Clinic

Year	O. M. H. D. of C. Fatigan	Mosquito infection rate	Mosquito infectivity rate	Blood slides collected and examined
(1)	(2)	(3)	(4)	(5)
1981	46.2	..	..	454
1982	44.5	..	..	50
1983	..	..	..	..
1984	..	..	..	..
1985	37.4	63.5	...	669

Year	Blood slides +Ve for M. F.	M. F. rate	Disease rate
(1)	(6)	(7)	(8)
1981	12	2.64	..
1982	..	..	..
1983	..	..	..
1984	..	..	..
1985	1	0.95	37.33

Anti-Leprosy Measures

There is a District Leprosy Officer in the district under the administrative control of the Chief District Medical Officer. Four Leprosy Eradication Units are functioning at Baleshwar, Jaleshwar, Bhadrak and Chandbali with a Medical Officer in charge of each unit. Under these units 71 para Medical Workers are working for detection of new leprosy cases and treatment. Besides, there are 11 S. E. T. (Survey, Education & Training) centres and 12 Rural Leprosy Clinics in the district. One para Medical Worker is working in each centre or clinic who is attached to the Medical Officer of the institution of the area where the centre or clinic is located.

There is a leprosy colony located at Bampada adjacent to Baleshwar town named Lewi's Leprosy Colony. It is functioning since 1944. 20 beds have been provided in this colony and it is managed by Hind Kustha Nivaran Sangha under the supervision of the Assistant District Medical Officer (P. H.) who is the District Honorary Secretary. One Rehabilitation centre is also functioning in the same colony premises since 1983. Adjacent to the Bampada Leprosy Colony, one temporary hospitalisation ward has been established since December 1981, with a provision for 20 beds.

The year-wise achievements made under the scheme for the period 1981-82 to 1985-86 in the district is given below.

Year	No. of leprosy cases detected	No. of leprosy cases treated
(1)	(2)	(3)
1981-82	17,394	12,895
1982-83	3,171	3,171
1983-84	2,673	2,673
1984-85	3,099	3,099
1985-86	2,879	2,879

Family Welfare

Family Planning later termed as Family Welfare Programme was implemented in the district as early as 1956. The District Family Welfare Bureau was established during 1964. It became a target-oriented and time-bound programme and its activities were chiefly confined to the distribution of conventional contraceptives. Only some Family Planning Clinics were then established and sterilization facilities were made available in the hospitals of the district.

The responsibility for implementation of the programme directly devolves on the Assistant District Medical Officer (Family Welfare, and Maternity Child Health) who works under the supervisory control of the Chief District Medical Officer. He is in-charge of the District Family Welfare Bureau consisting of four units—administrative, mass education and information, field and evaluation, and operation of Mobile Service Unit. The staff of the Bureau consists of one Administrative Officer, one District Mass Education and Information Officer, two Deputy Mass Education and Information Officers, and one Statistical Investigator, who respectively head the above mentioned units. For maternity and child health (MCH) work, there is one District Public Health Nurse. The Medical Officer, Primary Health Centre, looks after the Rural Family Welfare Organizations with the assistance of a Block Extension Educator, a Lady Health Visitor, the Auxiliary Nurse Midwives and other field workers. Besides, there are several other technical and non-technical personnel attached to the Bureau. Each of the Urban Family Welfare Centres is provided with one Block Extension Educator, one Auxiliary Nurse Midwife and Male Field Worker. The principal staff of a pilot project centre consists of a specialist (Obst. and Gynaecology), two Assistant Surgeons (male and female), a Block Extension Educator, a staff nurse, a Lady Health Visitor, an Auxiliary Midwife, a Male Field Worker, a Projectionist and the Aya.

Facilities for sterilization operation and the I. U. C. D. insertion (Intra Uterine Contraceptive Device) are made available in all the hospitals and dispensaries of the district.

The table given in the next 3 pages indicates the achievements made under the Family Welfare Programme during the period 1980-81 to 1985-86.

Achievements under Family Welfare Programme

Year		Number of sterilisation conducted			Number of I. U. C. D. insertions		
		Vasectomy	Tubectomy	Total	Loop	CU. 'T'	Total
(1)		(2)	(3)	(4)	(5)	(6)	(7)
1980-81	...	730	6,689	7,419	39	2,247	2,286
1981-82	..	630	9,049	9,679	9	2,034	2,043
1982-83	...	1,337	15,021	16,358	17	3,785	3,802
1983-84	..	586	20,158	20,744	...	5,456	5,456
1984-85	..	219	13,562	13,781	...	7,879	7,879
1985-86	..	433	17,552	17,985	...	9,376	9,376

(*Contd.*)

Year	Number of conventional contraceptive users	Number of oral pills distributed in cycles	Number of M. T. P.	Titanus Toxoid immunisation to expectant mothers		D.P.T. Immunisation of children (0—2 years)	
				Primary	Booster dose	Primary	Booster dose
(1)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1980-81	3,158	3,070	1,543	17,248	1,611	24,173	1,917
1981-82	4,549	2,912	2,746	24,384	3,031	23,516	2,059
1982-83	10,474	7,010	2,817	24,697	6,044	33,710	2,310
1983-84	13,615	18,227	3,228	29,623	5,130	37,029	4,369
1984-85	12,144	19,077	2,305	32,988	6,705	39,545	4,090
1985-86	14,511	27,927	2,359	29,895	7,034	33,681	3,549

(*Contd.*)

Year	D. P. T. Immunisation of children (3—8 years)		Prophylaxis against Nutritional Anaemia			Prophylaxis against blindness caused by Vitamin 'A' deficiency children (0—5 years)	
	Primary	Booster dose	Expectant and nursing mothers	Other women	Children	1st dose	2nd dose
(1)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1980-81	41,957	4,571	12,618	5,421	21,686	96,942	48,043
1981-82	42,821	4,313	24,244	13,132	43,004	102,944	39,871
1982-83	33,180	2,001	36,045	10,358	43,900	86,578	40,959
1983-84	39,767	2,612	27,877	13,055	54,299	105,798	57,364
1984-85	45,680	3,065	32,598	7,685	42,674	127,624	39,684
1985-86	26,199	1,416	20,893	3,854	27,118	132,499	63,178

(*Concld.*)

The year-wise activities of Maternity and Child Health organization made under the programme for the period 1980-81 to 1984-85 is furnished below :

Year	Number of Antenatal cases registered	Number of Post-natal cases registered	Number of delivery conducted
(1)	(2)	(3)	(4)
1980-81 ..	26,640	18,226	18,689
1981-82 ..	29,271	18,335	19,896
1982-83 ..	30,990	18,249	21,490
1983-84 ..	33,445	17,721	19,319
1984-85 ..	36,147	21,403	22,917

Nutrition Programme

In 1959, the State Nutrition Division was started under the administrative control of the Health and Family Planning Department except for a few years from 1964 to 1970 when it functioned under the Community Development Department.

Potentially the programme is very important in promoting the health and preventing diseases of the people. To know the food habits and diet patterns of the rural mass and to assess nutritional stage of the vulnerable groups, the Nutrition Division conducts now and then base line dietary (food consumption) and nutrition assessment survey as well as evaluation survey in the Applied Nutrition Programme (A. N. P.) Blocks allotted by the Community Development Department. This scheme also affords an effective field service to improve local diet through production, preservation and use of protective foods and ensures their effective utilisation by the vulnerable sections. Simple nutrition principles are imparted to the masses through practical demonstrations.

Out of 8 A. N. P. Blocks, a Dietary (food consumption) and Nutrition Assessment Survey of Baleshwar, Basta, Khaira and Tihiri have been conducted by the State Nutrition Division. Besides, a rapid Nutritional Survey was also made in Tihiri A. N. P. Block when it was affected by flood during the year 1976. A practical demonstration of "Infant Diet" was conducted by the Lady Nutrition Officer during the period of symposium organized by this Block in the year 1977.

The Nutrition Division supervises the feeding centres from time to time under Special Nutrition Programme, CARE, Special Child Relief Programme and World Food Programme implemented by the Community Development Department in the district.

Drugs Control

The Drugs and Cosmetics Act, 1940 is in force in Orissa since 1st April, 1947. For the first time in the state one Provincial Drugs Inspector was posted in 1951 at Bhubaneshwar for enforcement of the said Act. It continued till the middle of 1967 and after that five ranges were created for the state. The Baleshwar district was under the control of Western Range with headquarters at Cuttack.

The office of the Drugs Inspector, Baleshwar Range, with headquarters at Baleshwar started functioning since 1970. He is directly under the supervisory control of the Drug Controller, Orissa. The important functions of the organisation are enforcement of the Drugs and Consmetics Act, 1940 and other allied Acts, and Rules made thereunder. The Inspector in course of his duties chiefly attends to the complaints relating to the adverse drug reactions and sale of substandard and spurious drugs and cosmetics. He conducts surprise checks on the sale premises, seizes suspected batch of drugs, looks into the availability of essential drugs in the district, scrutinises the objectionable advertisements and enforces the Dangerous Drugs Act, in collaboration with the excise authorities. Further, he ensures the drugs price display and price control and issues essentiality certificates to the Pharmaceutical industries. Actions under the provisions of the relevant facts are taken against the sale of misbranded and substandard drugs. Frequently surprise inspections are conducted against misuse and sale of the dangerous drugs, such as, morphine and pethidine at higher price. But the performance of the Inspector in the district is very poor as will appear from the achievements of the organization given in the following table :

Year	Sales premises inspected	Show cause notices suggested to the licensing authority	Prosecution launched	Number of samples drawn	Complaints received and reported after investigation
(1)	(2)	(3)	(4)	(5)	(6)
1980-81	135	6	..	38	2
1981-82	106	4	..	45	1
1982-83	103	9	..	79	4
1983-84	111	25	2	97	5
1984-85	121	9	..	92	3
1985-86	80	17	..	40	2

Veneral disease

In most of the hospitals and dispensaries in the district facilities are available for the treatment of veneral disease.

Prevention of Food Adulteration and Water Pollution

The Director of Health & Family Planning Services, Orissa is the Food Health Authority under the provisions of the Central Prevention of Food Adulteration Act, 1954, which came into force in the entire state of Orissa in the year 1959. Under him there are two part-time Food Inspectors, i.e., the Chief District Medical Officer and the Assistant District Medical Officer (P. H.) who are directly incharge of implementation of the Act. Besides, there is one whole-time Food Inspector for the collection of food samples in the district. The Chief District Medical Officer, Baleshwar acts as the licencing authority under the Act to grant license in respect of manufacture and sale of food articles within his jurisdiction.

The table below shows the year-wise achievement of food samples collected from the district during the period 1980-- 85.

Year	No. of food samples drawn	No. of food samples examined	No. of samples found adulterated	No. of water samples collected and examined
(1)	(2)	(3)	(4)	(5)
1980	58	58	12	..
1981	43	43	19	..
1982	45	45	16	..
1983	70	70	15	..
1984	58	58	18	..
1985	86	86	25	..

During the above period, no water samples from the district were collected or examined under the Prevention of Food Adulteration Act.

Health Education

The Health Education Bureau according to the pattern prescribed by the Government of India, was started in the state in 1960 and was attached to the Director of Health & Family Planning Services

Orissa. The objectives of the scheme are to make the people realise their responsibility about their own health, the health of their family and that of the community at large. The State Health Education Bureau, Bhubaneshwar takes up health education activities in the district by deputing Health Education Units during flood, cyclone and epidemics when required by the Chief District Medical Officer. It mainly sends health education materials like posters and pamphlets on communicable disease, public health activities, etc., to the Chief District Medical Officer and the Primary Health Centres of the district. The staff of the Primary Health Centre like Medical Officer, Lady Health Visitors and Sanitary Inspectors utilise them for disseminating sanitary and hygienic principles among the vulnerable groups.

It also takes part in public education programmes during fairs and festivals in the district. The big Mela at Chandaneswar is attended by the staff of the State Health Education Bureau every year with health education materials like posters, health literature, Audio Visual equipments, etc., for educating the surrounding villagers and pilgrims on festival sanitation, food, water and environmental sanitation and on different communicable diseases.

Besides, the National School Health Programme has also been implemented in the district to impart school health education and health examination of the primary school students. The primary objective of the scheme is to cover the students of primary schools of the hilly, the tribal and the backward area of the district. The Primary Health Centre, Berhampur under Nilagiri C. D. Block has been selected by the Government of India for this purpose.

School Health Service

The School Health Service is one of the oldest schemes. It is working as a link in the general health programme. The School Health Service aims at preventing various diseases, and malnutrition among the school children of 0—15 age-group and protects them against future health hazards. The Government have formulated a scheme to undertake the medical examination of the students from the Primary to the High English schools. Accordingly, the Medical Officer examines the students at regular intervals and suggests remedial measures to the concerned students wherever any defect is noticed.

The following table indicates the jurisdiction of the Medical Officers according to the present set-up of the School Health Service.

Name of the Medical Officer	Jurisdiction and category of school.
(1)	(2)
School Medical Officer with headquarters at Cuttack	All the Boy's High English schools of the district
School Lady Medical Officer with headquarters at Bhubaneshwar	All the Girl's High English schools of the district
Assistant District Medical Officer (P. H.), Baleshwar	All the Boy's Middle English schools of the district
Lady Assistant Surgeons of the Subdivisional and District Headquarters Hospitals who are in-charge of the M. C. H. programme	All the Girl's Middle English schools of the district
Medical Officer of the Primary Health Centres of the district	All Primary school located within their respective jurisdictions

The School Medical Officer with headquarters at Cuttack examines the students of all the Boy's High Schools and the School Lady Medical Officer with headquarters at Bhubaneshwar undertakes the medical examination of the girl students of all the Girl's High Schools of the district. There is an Assistant District Medical Officer (P. H.) for the medical examination of the students of Boy's Middle English schools. But the girls students of the Girl's Middle English schools of the district are examined by the Lady Assistant Surgeons of the Subdivisional and the District Headquarters Hospitals who are in charge of the Maternity and Child Health Programme. The Medical Officers of the Primary Health Centres are generally conducting the medical examination of the students of Primary Schools located within their jurisdictions in the district.

National School Health Service

According to the instruction of the Government of India, the National School Health Service, another new scheme, has been started since 1977 in some selected C.D. Blocks of this district. The Primary Health Centre located at Berhampur under the Nilagiri Block of the district has been selected and the scheme is in operation there. The Primary Health Centre was provided with the cumulative health records, books, health kits and other school health materials for proper implementation of the scheme. The Medical Officer of the Primary Health Centre examines all the children of the Primary Schools located under the Block area at least twice during

their school years. The Assistant District Medical Officer (P. H.) is entrusted to supervise the activities and progress of the scheme. Under the present scheme the school children are given necessary protection by preventive measures like innoculation against cholera when required.

Besides, under the National Leprosy Control Scheme the school children are surveyed by the para Medical Workers. The cases detected among the school children are treated with anti-leprosy drugs. So far 19,465 number of school children have been physically examined and 9 cases of early leprosy were detected.

Under the Immunisation Programme the school children are given immunisation in order to protect them from communicable diseases such as, diptheria, pertussis, tetanus, measles, T. B. and typhoid. During the year 1979, nearly 16,291 school children were given D. P. T. immunisation in the district.

The following table indicates the number of High English school students examined under the school health service during the period 1983—85.

Year	Students examined	Students found defective
(1)	(2)	(3)
1983	18,199	6,184
1984	15,984	5,591
1985	11,026	3,284

Cholera Control Programme

The Cholera Control Programme started functioning in the district from 1970. Under this programme, 14 Cholera Supervisors and 56 Special Cholera Workers were engaged. Besides, the Sanitary Inspector and the Supervisor of the Primary Health Centre were also responsible to prevent outbreak of cholera within their allotted areas.

A Cholera Combat Team consisting of a Medical Officer, a Laboratory Technician, a Sanitary Inspector and two A. N. M. S. (Auxiliary Nurse-Midwives) is in operation in the district since June, 1979. They generally camp in the affected areas until normalcy is restored. They undertake both curative and preventive measures. They look to the health education of the masses. Normally they supervise regular chlorination of wells and other drinking and domestic water resources. Besides, they also collect samples of stool where outbreak of cholera is suspected for taking suitable remedial measures.

Under the Cholera Control Programme each of the 19 C.D. Blocks of the district has been provided with a Sanitary Inspector and a Disinfector. They work directly under the supervision of the Medical Officers of the Primary Health Centres. For each unit of 5,000 population one Multipurpose Worker (male) has been posted to visit the villages under his charge once every fortnight. During the visit he looks after the sanitation of the village and imparts suitable advice to the villagers on better aspect of health. Besides, he gives quick information regarding outbreak of cholera to the Primary Health Centre for immediate action.

For each 1000 population as per 1971 Census one Community Health Volunteer (C. H. V.) has been engaged after due training in the Primary Health Centre to look after the sanitation of the villages, to impart suitable advice to the villagers on promotion of health. He also gives quick information regarding outbreak of the diseases to the primary Health Centre for taking necessary action.

The achievements made under the programme during the years 1980 to 1985 are given in the following table:

Year	Cholera		Gastroenteritis		
	No. admitted	No. of deaths	No. admitted	No. of deaths	No. of inoculation performed
(1)	(2)	(3)	(4)	(5)	(6)
1981	58	6	178	29	273,057
1982	26	5	607	102	475,327
1983	60	6	458	70	357,373
1984	Nil	Nil	564	54	269,259
1985	42	4	638	75	484,927

Year	Disinfection of			
	Wells	Houses	No. of stool samples collected	No. found positive
(1)	(7)	(8)	(9)	(10)
1981	35,703	217	119	15
1982	61,667	520	134	11
1983	45,857	488	159	16
1984	43,859	430	41	—
1985	37,168	657	58	5

Small-pox Eradication Programme

Baleshwar, not unlike other districts of Orissa, was not free from superstitious beliefs about this malady. Supernatural agencies were regarded as the cause of its occurrence. As in other parts of the state, small-pox was worshipped as a form of goddess in the Baleshwar district from time immemorial. Every year it was taking a heavy toll of human lives.

Vaccination as a preventive measure against small-pox was unpopular among all classes in Orissa. Mass vaccination campaign under the Small-pox Education Programme was undertaken in 1961-62. With the implementation of the National Small-pox Eradication Programme in 1970-71 in Orissa, the district was also brought under it. Since 1973, the strategy of the programme chiefly constituted the safeguarding of the new-born children by primary vaccination, re-vaccinating the adult members once in every three years conducting door-to-door surveillance and taking precautionary measures against future outbreaks.

The execution of the programme chiefly rests with the Assistant District Medical Officer (P.H.) who is assisted by the Medical Officer of the Primary Health Centres. The staff of the S.E.P. (Small-pox Eradication Programme) allotted to each Primary Health Centre comprises one Sanitary Inspector and 3 to 4 Vaccinators. At present there are 20 S.E.P. Supervisors (Sanitary Inspectors) working in the district. During the normal time the S.E.P. Suprervisors prepare the plan and programme of vaccination and supervise the field activities. During the outbreak of epidemic they generally institute outbreak containment measures in the affected villages. Besides, they also supervise the immunisation programme in the district against the major childhood diseases which are preventible through immunisation. The vaccinators mainly carry out vaccination and containment measures against small-pox. In the present set-up they also undertake immunisation programme of children against diptheria. In the urban areas the local bodies are responsible for the implementation of the programme. The vaccinators of the S.E.P. staff have been posted in the Baleshwar Municipality and the Bhadrak Notified Area Council.

Besides, there is a Mobile Squad consisting of five vaccinators at the district headquarters to conduct special campaigns and to meet the exigencies of epidemics. Posted at Baleshwar, Jaleshwar and Bhadrak, there are three Paramedical Assistants who assist the Assistant District Medical Officer (P.H.) in supervising the activities of the National Small-pox Eradication Programme and

immunisation work in the district. They also supervise the performance of the vaccinators and the S. E. P. supervisors (Sanitary Inspectors) under their jurisdictions.

The following table shows the data of small-pox incidence and the achievements made in the field of vaccination in the district for the period 1969—77.

Year	No. of cases	
	Reported	Deaths
(1)	(2)	(3)
1969 ..	309	72
1970 ..	5	2
1971 ...	7	1
1972 ...	0	0
1973 ..	464	85
1974 ..	363	72
1975 ...	0	0
1976 ..	0	0
1977 ..	0	0

Year	Number of vaccination performed		No. of rounds of door to door search done in each year
	Primary vaccination	Re-vaccination	
(1)	(4)	(5)	(6)
1969 ..	1,15,915	27,673	
1970 ..	1,04,278	1,49,881	
1971 ..	1,19,256	3,51,926	
1972 ..	1,35,107	5,22,871	
1973 ..	11,054	5,50,701	2 rounds village to village
1974 ..	81,683	5,09,552	2 rounds door to door
1975 ..	52,776	2,79,986	7 rounds door to door
1976 ..	54,413	1,76,385	4 rounds door to door
1977 ..	38,290	64,238	1 round door to door in inaccessible areas only

The outbreak of small-pox was last reported from the areas Telengapati under the Bhadrak Notified Area Council in the early part of 1974. The district has been made free from samll-pox from the 23rd September, 1974.

Besides house-to-house active rounds, search for small-pox cases had been carried out in schools, markets, Melas, etc. To know if there is any hidden case of small-pox about 17 rounds of active searches for small-pox cases had also been conducted from door-to-door with special attention in the inaccessible areas of the district. Thereafter no new case could be detected not withstanding the intensive investigation combinedly made by the officers of the state as well as the World Health Organisation. With a view to ensuring detection of small-pox incidence a reward of Rs. 1,000 was declared for the first informer. But no reward has been made in case of small-pox as it has not been detected.

On 23rd April 1977, the Internal Assessment Committee on small-pox declared the district to be free from the disease of small-pox. Since then National Eradication Programme has strived to achieve this goal. The primary vaccination to the new-born and the unprotected children has been stopped since 1981-82.

A new scheme of Expanded Programme on Immunisation (E.P.I.) was started in the district in 1978. All the staff of National Smll-pox Eradication Programme (N.S.E. P.) have been retained to take up the activities of immunisation against the childhood communicable diseases of diphtheria, pertussis (whooping cough) tetanus, measles, tuberculosis, polio and typhoid.

The following table gives the activities of E. P. I. in the district.

Name of immunisation (1)	Age group (2)
D, P. T. (Diphtheria, pertussis, tetanus	0—2 Years
D. T. (Diphtheria, tetanus ..	5—6 Years
T. T. (tetanus toxide) ..	Pregnant women, children of 10 years to 16 years
T. A. (Typhoid antigen) ..	56 years
Oral Polio ..	0—2 Years

Underground Drainage and Protected Water-supply

In recent years various schemes have been implemented in the district to provide the people both in the urban as well as the rural areas with portable water. Presently four towns, viz., Baleshwar, Bhadrak, Basudebpur and Chandbali, and two villages

of Dhamnagar and Ertal have been provided with piped water. The execution and maintenance of the water supply schemes for the towns of Baleshwar, Bhadrak and Basudebpur, and the two villages of Dhamnagar and Ertal have been vested with the Executive Engineer, Baleshwar Public Health Division. He also looks after the maintenance of the Chandbali piped water supply project. The Executive Engineer, DANIDA Project Public Health Division, Bhadrak executed the project of piped water supply to Chandbali town. A short account of each of the water supply projects working in the district is given below.

Baleshwar town Water-supply Scheme

The first water supply scheme of the town was prepared in the year 1963 at an estimated cost of Rs. 26 lakhs. Subsequently, due to increase of population, there was acute scarcity of water and hence a permanent water supply scheme for Rs. 67.05 lakhs was prepared with provision for 16 numbers of tube-wells. Since these sources could not meet the demand, an additional sum of Rs. 6.63 lakhs was sanctioned to increase water supply. The scheme was completed in March, 1982.

From January 1986, 6.81 million litres of water is supplied daily to the town against a population of nearly 66,000 and thereby the *per-capita* supply comes to approximately 103.18 liters per day. Till today 2,350 water connections have been provided to private houses, 357 connections to government buildings and 291 street stand post have also been provided for public use.

Besides piped water supply to the town, 53 tube-wells have been provided at different places in the town where piped water supply facility is not available.

Bhadrak Town Water-supply Scheme

The execution of the Bhadrak town water supply system was started in 1973. The scheme has been completed in all respect excepting commissioning of 2 large dia high yielding gravel packed tube-wells. At present 3.50 lakhs gallons* of water is being supplied to the town.

Till today 415 house connections including government buildings have been given in the town. There are 98 stand posts provided to the town. In addition 153 hand pump tube-wells were sunk where piped water supply facilities are not available.

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* 10 gallons: 45·46 litres.

Pilot Piped Water-supply Scheme to Chandbali

In 1981, on request of Government of India, the DANIDA (Danish International Development Agency) has undertaken a major project for supply of drinking water in the coastal areas of Baleshwar, Cuttack and Puri districts.

The scheme of piped water supply to Chandbali town has been completed and water supply is effected since 8th June, 1985. 70 stand posts and 25 house connections have been provided so far. A diesel generating set has been installed since March, 1985 to overcome power failure at Chandbali.

The main work of the DANIDA Public Health Division, Bhadrak which executed the Chandbali piped water supply project is to provide adequate number of new tube-wells (at the rate of 1 number for a population of over 225) in the year 1991. 263 revenue villages are covered in this programme.

Piped Water-supply to Basudebpur

The piped water supply to Basudebpur town commenced during 1966-67 having one 4" dia tube-well fitted with 3 H. P. Eject to pump at the source. There were 29 numbers of stand posts for supply of drinking water to the whole town. Due to inadequate water supply one 8" dia tube-well was sunk in 1980 having a yield of 4,000 gallons per hour and a 7.5 H. P. submersible pump has been fitted during December, 1982. From that date regular water supply through 25 numbers of stand posts have been commenced. Recently, 12 numbers of private connections have been given from this water-supply system.

Piped Water-supply to Dhamnagar

The water-supply scheme to Dhamnagar was executed during 1965 at an estimated cost of Rs.1.633 lakhs. Almost all the works have been completed except the balancing tank. In this scheme there was provision of supplying water through 33 double mouthed stand posts. Due to damage by flood in 1975, water-supply is being effected only through 16 numbers of stand posts in addition to 20 numbers of hand pump tube-wells.

Piped Water-supply to Ertal

The water-supply to Ertal commenced during the year 1970-71 at an estimated cost of Rs. 2.06 lakhs having one 4" dia tube-well fitted with 3 H· P. Eject to pump at source. The water is being supplied to the whole village through 18 numbers of single mouthed stand posts in two shifts. The yield of existing tube-well had greatly been reduced.

Rural Water Supply

As stated elsewhere no specific attention was given previously to the problem of providing the rural people with potable water. The people were generally depending on the polluted water of the tanks, wells, pools, rivers, etc. In the past few years, different schemes have been undertaken at different times to fulfil their requirements.

About 3,555 villages of the district have been identified as drinking water problem villages by survey and investigation till the end of 1985. During this period 10,015 tube-wells were installed in identified drinking water problem villages. This apart 1,443 tube-wells were also provided in unidentified problem villages under various schemes. There are 213 drinking water tube-wells in the district. During 1982-83, a sum of Rs. 187.40 lakhs was received for the original installation of tube-well whereas in 1984—85, Rs. 158.12 lakhs were provided for the purpose.

Steps are being taken by this organisation to convert the surface latrines into flush latrines in the district.

None of the towns of Baleshwar district is provided with underground sewerage system till 1985. It is proposed by the Government that the sewerage scheme of Baleshwar town will be taken up under United Nations Development Programme, Global Project, Orissa. The scheme is under preparation.

Slum Clearance and Improvement

In two of the five urban agglomerations of the district, viz, Baleshwar and Bhadrak, Slum Clearance and Improvement Scheme has been put into operation. Under this scheme, in the Baleshwar municipality, as many as 37 tenements have been erected by the end of 1985 at an outlay of nearly Rs 1·92 lakhs, which provided accommodation for 37 persons. Under the improvement of the existing Urban Slum Schemes which is a Central Scheme, the grants received from 1984 to 1986 are Rs. 4·15 lakhs. The total expenditure till March 1986, are Rs. 2·65 lakhs. The number of beneficiaries under this scheme is 1,061.

In the Bhadrak Notified Area Council, the Slum Clearance Scheme was undertaken in 1964-65. Under the scheme a double storied slum building consisting of 12 slum quarters have been constructed at a cost of Rs. 78,950/-. No such grants or loans have been received by the Notified Area Council for this purpose during the years 1980 to 1985.

APPENDIX I

Vital Statistics

Year	Births			Deaths		
	Rural	Urban	Total	Rural	Urban	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1976	29,732	1,563	31,295	14,262	675	14,937
1977	27,332	1,912	29,244	13,581	872	14,453
1978	26,197	2,080	28,277	13,255	849	14,104
1979	25,401	2,630	28,031	12,894	1,035	13,929
1980	25,838	3,142	28,980	10,450	1,114	11,564
1981	22,142	3,129	25,271	9,479	1,293	10,772
1982	23,178	3,690	26,868	10,664	1,361	12,025
1983	22,014	3,901	25,915	9,898	1,282	11,180
1984	22,680	3,915	26,595	6,846	1,524	8,370
1985	29,441	3,538	32,979	N.A.	N.A.	N.A.

(Contd.)

Year	Infant Deaths			Birth rate per 1000 population		
	Rural	Urban	Total	Rural	Urban	Total
(1)	(8)	(9)	(10)	(11)	(12)	(13)
1976	2,444	89	2,533	N.A.	N. A.	N.A.
1977	2,191	138	2,329	N.A.	N.A.	N.A.
1978	2,099	121	2,220	N.A.	N.A.	N.A.
1979	1,989	178	2,167	12·63	15·29	12·84
1980	1,512	180	1,692	12·63	17·40	13·02
1981	1,081	199	1,280	10·66	16·56	11·15
1982	1,282	260	1,542	10·97	18·74	11·64
1983	1,027	179	1,206	10.26	18.94	11·02
1984	1,215	238	1,453	10.41	18·21	11·11
1985	N.A.	N.A.	N.A.	13.30	15·87	13·54

(Contd.)

Year	Death rate per 1000 population			Infant mortality rate per 1000 of life births		
	Rural	Urban	Total	Rural	Urban	Total
(1)	(14)	(15)	(16)	(17)	(18)	(19)
1976	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1977	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1978	N.A.	N.A.	N.A.	A.A.	N.A.	N.A.
1979	6.41	6·02	6.38	78.30	67.68	77.31
1980	5.11	6·19	5.20	58.52	57.29	58.39
1981	4.56	6·84	4.75	48.80	63.60	50.65
1982	5.05	6·91	5.21	55.31	55.81	55.38
1983	4.61	6.22	4.76	46.65	45.89	45.54
1984	3.14	7.09	3.50	53.57	60.79	54.63
1985	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

(Concld.)

APPENDIX II

Death from Chief Diseases for the period 1976—84

Year	Cholera			Small-pox		
	Rural	Urban	Total	Rural	Urban	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1976 ..	9	N. A.	9	N. A.	N. A.	N. A.
1977 ..	7	N. A.	7	N. A.	N. A.	N. A.
1978 ..	16	N. A.	16	N. A.	N. A.	N. A.
1979 ..	N. A.	N. A.	N. A.	N. A.	N. A.	N. A.
1980 ..	N. A.	N. A.	N. A.	N. A.	N. A.	N. A.
1981 ..	N. A.	N. A.	N. A.	N. A.	N. A.	N. A.
1982 ..	N. A.	N. A.	N. A.	N. A.	N. A.	N. A.
1983 ..	N. A.	N. A.	N. A.	N. A.	N. A.	N. A.
1984 ..	N. A.	N. A.	N. A.	N. A.	N. A.	N. A.

(*Contd.*)

Year	Fever			Dysentery and Diarrhoea		
	Rural	Urban	Total	Rural	Urban	Total
(1)	(8)	(9)	(10)	(11)	(12)	(13)
1976 ...	12,133	15	12,148	222	23	245
1977 ..	11,972	69	12,041	197	73	270
1978 ...	11,756	102	11,858	137	54	191
1979 ...	11,316	113	11,429	145	78	223
1980 ..	9,235	126	9,361	104	60	164
1981 ..	5,558	253	5,811	74	60	134
1982 ...	8,929	108	9,037	176	71	247
1983 ..	11	31	42	172	82	254
1984 ...	137	81	218	378	102	480

(Contd.)

Year	Respiratory			Injuries		
	Rural	Urban	Total	Rural	Urban	Total
(1)	(14)	(15)	(16)	(17)	(18)	(19)
1976 ..	33	115	148	449	13	462
1977 ..	54	53	107	369	58	427
1978 ..	81	45	126	381	51	432
1979 ..	85	125	210	323	62	385
1980 ..	61	47	108	314	61	375
1981 ..	312	110	422	282	86	368
1982 ..	98	60	158	322	43	365
1983 ..	13	16	29	311	81	392
1984 ..	120	40	160	267	129	396

(Contd.)

Year	Other causes			All causes		
	Rural	Urban	Total	Rural	Urban	Total
(1)	(20)	(21)	(22)	(23)	(24)	(25)
1976 ..	1,416	509	1,925	14,262	675	14,937
1977 ..	982	619	1,601	13,581	872	14,453
1978 ..	884	597	1,481	13,255	849	14,104
1979 ..	1,025	657	1,682	12,894	1,035	13,929
1980 ..	736	820	1,556	10,450	1,114	11,564
1981 ..	3,253	784	4,037	9,472	1,293	10,765
1982 ..	1,139	1,079	2,218	10,664	1,361	12,025
1983 ..	9,688	775	10,463	9,898	1,282	11,180
1984 ..	6,494	622	7,116	6,846	1,524	8,370

(Contd.)

APPENDIX III

Number of patients of different diseases treated / died in the Hospitals/ Dispensaries / Primary Health Centres

Year	Malaria			Dysentery		
	Outdoor	Indoor	Death	Outdoor	Indoor	Death
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1980 ..	41,720	387	7	182,084	914	17
1981 ..	47,853	362	7	189,202	931	8
1982 ..	41,003	438	8	100,711	1,035	14
1983-84 ..	53,362	261	3	404,556	1,511	28
1984-85 ..	29,724	261	2	491,297	3,154	55

Year	Typhoid			Yaws		
	Outdoor	Indoor	Death	Outdoor	Indoor	Death
(1)	(8)	(9)	(10)	(11)	(12)	(13)
1980 ..	10,221	794	36	..	..	..
1981 ..	10,928	870	28	..	..	..
1982 ..	9,458	877	43	..	..	..
1983-84 ..	11,032	849	27	..	..	..
1984-85 ..	8,228	942	32	..	..	..

(Contd.)

Year	Filaria			Cholera		
	Outdoor	Indoor	Death	Outdoor	Indoor	Death
(1)	(14)	15)	(16)	(17)	(18)	(19)
1980 ..	56,597	240	..	3	3	...
1981 ..	49,064	196	..	9	1	1
1982 ..	53,299	201	..	1	...	...
1983-84 ..	52,864	153	..	..	..	..
1984-85 ..	58,982	238	1	..	..	..

Year	Small-pox			T. B.		
	Outdoor	Indoor	Death	Outdoor	Indoor	Death
(1)	(20)	(21)	(22)	(23)	(24)	(25)
1980 ..	..	..	..	5,555	404	19
1981 ...	..	...	..	2,248	515	45
1982 ..	..	..	..	1,930	531	38
1983 ..	..	..	..	865	244	15
1984-85 ..	..	..	..	2,861	529	47

(Contd.)

Year	Tetanus			Cancer		
	Outdoor	Indoor	Death	Outdoor	Indoor	Death
(1)	(26)	(27)	(28)	(29)	(30)	(31)
1980 ..	253	160	42	53	28	..
1981 ..	345	201	62	438	64	4
1982 ..	294	186	64	300	32	2
1983 ..	227	176	39	240	18	..
1984 ..	168	150	39	195	42	3

Year	Heart Disease			Other causes		
	Outdoor	Indoor	Death	Outdoor	Indoor	Death
(1)	(32)	(33)	(34)	(35)	(36)	(37)
1980 ..	2,221	700	85	25,41,568	25,772	796
1981 ..	2,034	603	106	26,24,425	26,751	932
1982 ..	2,240	648	111	27,17,562	30,233	975
1983 ..	5,406	683	145	29,13,161	31,220	1,020
1984 ..	4,104	523	125	31,25,800	33,250	1,271

(*Concld.*)

APPENDIX IV

Name, Location, Year of Establishment, etc., of the Medical Institutions of the district

Name and Location	Year of Establishment	Number of			Number of Beds		
		Doctors	Pharmacists	Nurses	Male	Female	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Hospitals							
District Headquarters Hospital, Baleshwar	1921	33	6	26	76	70	146
Subdivisional Hospital, Bhadrak ...	1948	8	3	4	30	20	50
Subdivisional Hospital, Nilagiri ..	1948	7	3	4	20	20	40
Government Hospital, Soro ..	1969	3	1	3	6	4	10
Government G. K. Bhatter Hospital, Jaleshwar	1979	2	1	3	10	10	20
Government Hospital, Khantapara ..	1959	1	1	1	5	5	10
Government Hospital, Puruna Bazar, Bhadrak	1959	2	1	1	5	5	10
Government Hospital, Bethipur ..	1973	1	1	1	2	2	4
Government Sunhat Maternity Hospital, Baleshwar	1959	2	1	1	..	10	10

(Contd.)

APPENDIX IV—*(contd.)*

Name and Location	Year of Establishment	Number of			Number of Beds		
		Doctors	Pharmacists	Nurses	Male	Female	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dispensaries							
Government Dispensary, Ayodhya ...	1962	1	1	..	..	..	..
Government Dispensary, Asurali ..	1965	1	1	..	..	...	..
Government Dispensary, Bansada ..	1965	1	1	..	..	..	
Government Dispensary, Bant ...	1959	1	1	..	..	..	..
Government Dispensary, Baliapal ..	1965	1	1	..	..	..	..
Government Dispensary, Balikhand ..	1967	1	1	..	...	..	..
Government Dispensary, Bishnupur ...	1966	1	1	—	...	...	..
Government Dispensary, Bagudi ...	1970	1	1	..	...	...	..
Government Dispensary, Dhusuri ...	1953	1	..	...	...	...	..
Government Dispensary, Dungura ...	1965	1	1	..	...	..	..
Government Dispensary, Deula ...	1956	1	1	..	...	...	..
Government Dispensary, Ghanteswar ...	1959	1	1	..	...	...	..
Government Dispensary, Irda ..	1959	1	1	..	...	...	..
Government Dispensary, Eram ..	1959	1	1	..	..	..	..
Government Dispensary, Jamalpur ...	1959	1	1	...	...	...	—
Government Dispensary, Jaleshwar ...	1959	1	1	—	—	—	—

APPENDIX IV—(*Contd.*)

Name and Location	Year of Establishment	Number of			Number of Beds		
		Doctors	Pharmacists	Nurses	Male	Female	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Government Dispensary, Kakhada ..	1962	1	1	..	—	..	..
Government Dispensary, Khuard ..	1965	1	1	..	..	..	..
Government Dispensary, Nangaleswar ..	1965	1	1	..	..	..	..
Government Dispensary, Manjur ..	1965	1	1	..	..	..	..
Government Dispensary, Manjuri Road ..	1959	1	1	..	..	..	..
Government Dispensary, Naikandihi ..	1959	1	1	..	..	..	..
Government Dispensary, Nampo ..	1962	1	1	1	..	..	..
Government Dispensary, Olamara ..	1947	1	1	..	..	..	..
Government Dispensary, Oupada ..	1947	1	1	..	..	..	..
Government Dispensary, Palsia ..	1959	1	1	..	..	..	..
Government Dispensary, Santoshpur ..	1965	1	1	..	..	..	..
Government Dispensary, Singla ..	1959	1	1	..	..	..	..
Government Dispensary, Bhograi ..	1959	1	..	..	..	..	..
Gopabandhu Dispensary, Nayabazar, Baleshwar	..	1	1	..	..	..	..
E. S. I. Dispensary, Baleshwar ..	1979	1	1	1	..	..	..
Primary Health Centre							
Anantapur P. H. C. ..	1962	2	1	..	4	2	6

Agarpada P. H. C.	..	1953	2	1	..	4	2	6
Berhampur P. H. C.	..	1963	2	1	..	4	2	6
Bhandaripokhari P. H. C.	...	1962	2	1	..	4	2	5
Basta P. H. C.	..	1962	2	1	..	4	2	6
Barapada P. H. C.	..	1965	2	1	...	4	2	6
Basudebpur P. H. C.	..	1962	2	1	..	4	2	5
Chandbali P. H. C.	...	1962	2	1	..	6	4	10
Dhamnagar P. H. C.	..	1962	2	1	..	4	2	6
Gopalpur P. H. C.	..	1965	2	1	..	4	2	6
Hatigarh P. H. C.	..	1965	2	1	..	..	..	..
Iswarpur P. H. C.	...	1965	2	1	..	4	2	6
Jaleshwarpur P. H. C.	..	1965	2	1	..	4	2	6
Khaira P. H. C.	..	1962	2	1	...	4	2	6
Pratappur P. H. C.	...	1965	2	1	...	..	..	..
Remuna P. H. C.	...	1960	2	1	...	4	2	6
Rupsa P. H. C.	..	1962	2	1	...	4	2	6
Similia P. H. C.	...	1969	2	1	...	4	2	6
Tihiri P. H. C.	..	1953	2	1	..	4	2	6
Medical Aid Centre								
Betada M. A. C.	..	1975	1	1	..	...	..	...
Dandapalsa M. A. C.	...	1969	1	1	...	...	...	..
Dahamunda M. A. C.	...	1970	1	1	...	...	...	..

APPENDIX IV—(*Concld*)

Name and Location	Year of Establishment	Number of			Number of Beds		
		Doctors	Pharmacists	Nurses	Male	Female	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Khirkona M. A. C.	1975	1	1	..	..	..	..
Kasafal M. A. C.	1975	1	1	..	..	..	..
Pirhat M. A. C.	1970	1	1	..	..	..	..
Saradhapur M. A. C,	1974	1	1	..	..	..	..
Sikharpur M. A. C.	1974	1	1	..	..	..	..
Srirampur Road M. A. C.	1970	..	1	..	..	..	..
Sabrang M. A. C.	1975	..	1	..	..	..	..
Pakhar First Aid Centre	1959	1	1	..	..	..	..
Subsidiary Health Centres							
Paschimbad Subsidiary Health Centre	1970	1	1	..	..	..	..
Aradi S. H. C.	1979	1	1	..	..	..	..
Salabani S. H. C.	1980	1	1	..	..	..	..
Kamarda S. H. C.	1980	..	1	..	..	..	..
Gududa S. H. C.	1980	..	1	..	..	..	..
Sajanagada S. H. C.	1982	1	..	..	..	..	..
Jagannathprasad S. H. C.	1982	1	..	..	..	..	..

Nadigan S. H. C.	..	1982	1	..	..	..	..	..
Bahanaga S. H. C.	..	1982	1	..	..	..	..	..
Guamal S. H. C.		1983	1	..	..	..	..	..
Chandaneswar S. H. C.	..	1984	1	..	..	..	..	..
Balipada S. H. C.	..	1984	1	..	..	..	..	..
Banhlibindha S. H. C.	..	1984	1	..	..	..	..	..
Manipur S. H. C.	..	1984	1	..	..	..	..	..
Paunsakali S. H. C.	..	1984	1	..	..	..	..	..
Kenduapada S. H. C.	..	1984	1	..	..	..	..	..
Rasulpur S. H. C.	..	1984	1	..	..	..	..	..
Saud S. H. C.	..	1984	1	..	..	..	..	..
Ainpal S. H. C.	..	1984	1	..	..	..	..	..
Bodak S. H. C.	..	1984	1	..	..	..	..	..
Santaragadia S. H. C.	..	1984	1	..	..	..	..	..
Chumida S. H. C.	..	1984	1	..	..	..	..	..
Kansa Mini Health Centre	..	1980	1	1	..	..	..	..

Other Institutions								
Police Hospital, Baleshwar	..	1901	1	1	1	24	...	24
District Jail Hospital, Baleshwar	...	1989	1	1	..	10	...	10
Railway Health Unit, Baleshwar	..	1962	1	1	...	..	...	...
Railway Health Unit, Bhadrak	..	...	1	1	...	...	...	...
Private Institutions								
St. Vincent Hospital, Baleshwar	..	1978	1	..	1	15	15	30
Lady Liew's Maternity and Child Health Centre, Baleshwar.		..	..	..	..	..	...	..
Gopabandhu Charitable Dispensary, Nayabazar, Baleshwar.		...	..	..	...	..	..	..
Nursing Home, Baleshwar	..	..	..	..	..	..	...	...
Blood Bank, Baleshwar	..							
A. N. M. Training Centre, Baleshwar	..	...	..	..	..	..	..	..

APPENDIX V

Name and location of Ayurvedic dispensaries in the district	Year of establishment
(1)	(2)
Government Ayurvedic Dispensary, Baleshwar ..	1972
Government Ayurvedic Dispensary, Brundabanpur ..	1972
Government Ayurvedic Dispensary, Ada ..	1955
Government Ayurvedic Dispensary, Ambulakuda ..	1976
Government Ayurvedic Dispensary, Aradi ..	1949
Government Ayurvedic Dispensary, Ertal ..	1975
Government Ayurvedic Dispensary, Phulwarkasba ..	1978
Government Ayurvedic Dispensary, Geltua ..	1972
Government Ayurvedic Dispensary, Gopinathpur ..	1967
Government Ayurvedic Dispensary, Haladipada ..	1972
Government Ayurvedic dispensary, Hatikhali ..	1979
Government Ayurvedic Dispensary, Kasati ..	1972
Government Ayurvedic Dispensary, Kochiakoili ..	1975
Government Ayurvedic Dispensary, Moto ..	1962
Government Ayurvedic Dispensary, Panchupali ..	1978
Government Ayurvedic Dispensary, Ramlila ..	1972
Government Ayurvedic Dispensary, Sahada ..	1971
Government Ayurvedic Dispensary, Sartha ..	1960
Government Ayurvedic Dispensary, Tudigadia ..	1959
Government Ayurvedic Dispensary, Odangi ..	1981
Governmer t Ayurvedic Dispensary, Badapokhari ..	1981
Government Ayurvedic Dispensary, Anapal ..	1984
Government Ayurvedic Dispensary, Chudamani ..	1985
Government Ayurvedic Dispensary, Chatrapur ..	1985
Government Ayurvedic Dispensary, Berhampur ..	1985

APPENDIX VI

Name and location of Homeopathic institutions in the district	Year of establishment
(1)	(2)
Government Homeopathic Dispensary, Amarda Road	1972
Government Homeopathic Dispensary, Arasa ..	1972
Government Homeopathic Dispensary, Barunasingh	1968
Government Homeopathic Dispensary, Baleshwar ..	1972
Government Homeopathic Dispensary, Bodak ..	1978
Government Homeopathic Dispensary, Betaligan ..	1972
Government Homeopathic Dispensary. Bahanaga ..	1979
Government Homeopathic Dispensary, Deula ..	1974
Government Homeopathic Dispensary, Gud ..	1972
Government Homeopathic Dispensary,Gadapokhari	1975
Government Homeopathic Dispensary, Guamal ..	1971
Government Homeopathic Dispensary, Gopalbindha	1979
Government Homeopathic Dispensary, Kudei ..	1975
Government Homeopathic Dispensary, Korakora ..	1965
Government Homeopathic Dispensary, Kasabajayapur	1972
Government Homeopathic Dispensary, Matiali ..	1972
Government Homeopathic Dispensary, Netua ..	1974
Government Homeopathic Dispensary, Nafrai ..	1979
Government Homeopathic Dispensary, Panpara ..	1979
Government Homeopathic Dispensary, Panisapada ..	1979
Government Homeopathic Dispensary, Paliabindha ..	1971
Government Homeopathic Dispensary, Rahania ..	1971
Government Homeopathic Dispensary, Sudarsanpur	1972
Government Homeopathic Dispensary, Sujansinghpur	1972
Government Homeopathic Dispensary, Tadada ..	1972
Government Homeopathic Dispensary, Brahmanigan	1980
Government Homeopathic Dispensary, Charichokari	1980
Government Homeopathic Dispensary, Jagannathpur	1980
Government Homeopathic Dispensary, Purusottampur	1980
Government Homeopathic Dispensary, Upardiha ..	1980
Government Homeopathic Dispensary, Ramakrushnapur	1984
Government Homeopathic Dispensary, Erada ..	1984
Government Homeopathic Dispansary, Mahisapata	1984
Government Homeopathic Dispensary, Tunda ..	1985
Government Homeopathic Dispensary, Olanga ..	1985
Government Homeopathic Dispensary, Tapandia ..	1985

APPENDIX VII

Year-wise achievements made under T. B. Control Programme during 1980 to June 1986

Year	Case detection			Total	B. C.G.
	Sputum +ve	X-ray +ve	Ext. Pul.		Vaccination
(1)	(2)	(3)	(4)	(5)	(6)
1980	330	476	186	992	67,240 (0—20 year)
1981	423	434	196	1053	70,611 (0—20 year)
1982	431	558	193	1182	53,436 (0—20 year)
1983	580	1051	341	1972	46,010 (0—20 year)
1984	789	1063	417	2269	52,520 (0—20 year)
1985	909	1424	480	2813	39,129 (0—4 year)
1986 (Up to June)	600	958	267	1825	7,398 (0—1 year)