

CHAPTER XVI

MEDICAL AND PUBLIC HEALTH SERVICES

145. Survey of Public Health and Medical Facilities in early times

Ayurvedic system of medicine is very popular in this district since early times. The rulers of different ex-States that constitute this district patronised Ayurvedic treatment in their States although allopathic system was in vogue side by side with Ayurvedic system almost since the beginning of this century.

Besides Ayurveda, the superstitious practice of magic-cure was prevalent in the district and witch-doctors were honoured and respected. The tradition of such magic-cure revived in this district in an unprecedented scale in 1950, a short description of which is given below.

A cow-herd boy named Nepal Chandra Sahu (popularly called Nepali Baba) of village Rantalai in Angul subdivision once got high fever sometimes in 1948, when he was tending sheep on a hill known as Mandaragiri. He is said to have been miraculously cured by a *Sadhu* who told him of a medicine which was reported to be the panacea of all diseases. Thenceforward, the boy distributed medicine in the neighbouring villages and by 1950 the magic power of the medicine was widely publicised in leading newspapers of India. Large numbers of patients from all parts of India began to visit the village Rantalai. The daily average passenger traffic at Meramundali Railway Station was estimated to be 5,000 and besides that crowds came in buses, cars, bullock-carts and on foot. Millionaires and intellectuals came by air up to Bhubaneswar and from there by cars. Thus lakhs of people congregated in that small village. The inevitable result was the outbreak of virulent types of epidemics which took a heavy toll of human life, and the place presented a ghastly scene. 5,000 bodies were collected from Railway Stations and from the road side. It is not known how many people died in the forest. The health and medical staff proved helpless in controlling the situation and the help of the Orissa Military Police was sought to remove the dead bodies. The Government, therefore, took stringent measures to stop distribution of "medicine" by the boy and bringing in of patients.

The climate of the district varies from place to place, but on the average it is hot and humid. In the ex-State of Dhenkanal, it is dry and healthy except that of the jungle tracts, some parts of which are malarious. The climate of Pal Lahara is extreme where spring is not at all felt. The climate of Hindol is notoriously unhealthy except towards the more open parts to the North. The climate of Athmallik is hot and dry, and so also that of Angul and Talcher, and in the months of April, May and

June the heat becomes intense in these subdivisions. On the whole the climate of the district is extreme and enervating and its effect on the people in general makes them lethargic.

146. Vital Statistic

Prior to 1952, there was no systematic arrangement for the collection and registration of vital statistics in six out of seven subdivisions of the district which were ex-State areas. Registration was being done in Angul which was previously with Cuttack district. Regular collection of vital statistics was made from the 1st January, 1952. The collection in the primary stage was done by village Chaukidars. They collected information about births and deaths during their rounds in the villages and reported them at the police-stations. The Thana Officers were sending monthly consolidated reports to the District Health Officer.

Chaukidari system was abolished in 1965. The collection of vital statistics was stopped except for the three towns of Dhenkanal, Angul, and Talcher. After promulgation of Grama Rakhi Ordinance, 1967, the Thana Officers have again been entrusted with the work of births and deaths registration from the 1st January, 1967. Regular and systematic collection of vital statistics has not yet been started.

The following tables give vital statistics of the district * from 1961 to 1969.

BIRTH AND INFANT DEATHS IN THE DISTRICT

Year		Births	Birth-rate	Infant death	Infant mortality-rate (per thousand births)
1961	..	27,717	26.78	3,838	138.47
1962	..	24,831	23.56	3,037	122.31
1963	..	28,696	26.74	3,112	108.48
1964	..	23,745	21.74	2,989	125.87

* Figures of only four towns of Dhenkanal, Angul, Talcher, and Bhuban have been furnished since 1965 due to non-submission of vital statistics returns by police-stations.

BIRTH AND INFANT DEATHS IN THE TOWNS OF
DHENKANAL, ANGUL, TALCHER, AND BHUBAN

Year	Births	Birth-rate	Infant death	Infant mortality-rate
1965	446	8.92	42	94.17
1966	458	8.97	43	93.90
1967	320	7.62	40	125.00
1968	451	8.50	50	110.86
1969	685	12.68	83	121.16

The large fluctuation shows unreliable reporting

DEATHS DUE TO VARIOUS CAUSES IN THE DISTRICT

Year	Total	Cholera	Small Pox	Fever	Dysentery and Diarrhoea	Respiratory	Injuries	Other causes
1	2	3	4	5	6	7	8	9
1961	14,283	..	8	9,210	854	264	253	3,694
1962	11,497	10	3	7,473	476	289	252	2,994
1963	11,375	..	..	6,987	450	243	245	3,450
1964	13,494	..	..	8,879	626	277	221	3,491

The figures show that malaria eradication had no impact by 1964.

DEATHS DUE TO VARIOUS CAUSES IN THE TOWNS OF
DHENKANAL, ANGUL, TALCHER, AND BHUBAN

1965	..	187	..	..	89	3	5	1	89
1966	..	212	..	..	91	30	3	5	83
1967	..	197	..	1	91	29	12	4	60
1968	..	232	..	..	82	28	5	9	108
1969	..	398	..	..	80	38	29	5	246

147. Diseases common to the district

The people depend on tanks and wells for drinking water which becomes scarce during summer. In years of drought, people are compelled to consume polluted water. The insanitary conditions of villages and the unclean habits specially of the lower classes of people are responsible for the prevalence of many diseases. The most common diseases are dysentery, diarrhoea, malarial fever, venereal diseases and skin diseases of various kinds. The position, however, has not improved in spite of preventive and public health measures undertaken by Government in recent times.

The following table shows the number of persons treated for different diseases during the last 8 years :

PATIENTS TREATED IN HOSPITALS AND DISPENSARIES

Disease	1962	1963	1964	1965	1966	1967	1968	1969	
Malaria	289	17,019	12,631	N.A.	1,744	6,345	6,083	5,276	
Dysentery	47,270	48,953	44,369	43,741	55,271	49,414	52,888	47,131	
Typhoid	675	878	1,425	1,266	1,432	1,747	1,640	1,603	
Yaws	80	91	118	107	73	88	37	61	
Filaria sis	1,160	2,166	2,037	1,510	2,622	3,436	2,601	2,684	
T.B.									
(Only indoor—patients)	{ Attacks ..	335	444	857	1,165	611	1,368	3,208	1,855
	{ Deaths ..	6	9	7	6	6	2	5	2
Titanus									
(Only indoor—patients)	{ Attacks ..	249	297	246	330	289	373	335	283
	{ Deaths ..	22	29	35	35	17	38	44	36

(f) Fever

Fever accounts for more than 60 per cent of total deaths in the district. Typhoid and malaria occur every year. There was a severe outbreak of influenza in 1918. It was so severe that the population decreased. Since then it has not appeared in such a virulent form.

Malaria is responsible for the largest number of deaths. The tracts covered with forests are infested with the disease. Although it prevails throughout the year, the largest number of cases occur during the rains. Tertian and quartan fevers are common in the district.

Malaria spread throughout the district during the years 1936, 1937 and 1938. Incidence of death from malaria became very heavy specially in Angul.

Prior to 1948, there was no arrangement for taking anti-malaria measures except treatment of cases in the hospitals and dispensaries. During the First Five-Year Plan Period (April 1951 to March 1956), this

district was included under the National Malaria Control Programme with sub-units at Dhenkanal, Athmallik, and Hindol. The headquarters of this programme was located at Angul. Spraying of D. D. T. and distribution of anti-malaria drugs were the main activities of the programme. The control programme was switched over to that of "Eradication" from the 1st April, 1958, and 50 per cent of the additional expenditure as well as the cost of insecticides, drugs, equipments and vehicles were met by the Government of India. Subsequently, surveillance operations under the above programme were launched in 1960. According to this programme, house-to-house detection of fever cases has been taken up and treatment of positive malaria cases attended to. Even then a considerable number of malaria cases are being treated in hospitals every year. But the attendance of such patients is gradually falling.

A statement showing the number of villages attended and holdings sprayed is furnished below*. In hilly areas three rounds were conducted from 1963-64 to 1967-68.

Year		No. of villages attended	Holdings sprayed	D. D. T. consumed (in kg.)
1		2	3	4
1967-68 ..	1st Round ..	2,086	104,987	24,988
	2nd Round ..	2,087	106,372	25,080
	3rd Round ..	148	8,886	2,141
1968-69 ..	1st Round ..	1,925	105,912	19,821
	2nd Round ..	2,085	105,473	25,284
1969-70 ..	1st Round ..	2,034	103,795	25,787
	2nd Round ..	2,034	104,585	26,603

(ii) Dysentery and Diarrhoea

Cases of dysentery and diarrhoea occur particularly during early months of the monsoon. Death rate from these diseases is also quite high as shown earlier in the statement. These diseases are mostly due to the use of polluted water and insanitary condition of living in rural areas. The problem is being faced by excavation of drinking water wells and protection of tanks and also by inculcation of hygienic rules.

* The figures relate to the Angul unit, which comprises the entire district of Dhenkanal (excluding some portions of Pal Lahara subdivision) and the Athgarh subdivision of Cuttack district.

(iii) Filaria

There was no specific arrangement for anti-filaria measures in the ex-State areas of Dhenkanal, Talcher, Hindol, Pal Lahara, and Athmallik during the Durbar regime except the treatment of cases in hospitals and dispensaries. It is reported that filariasis which was previously not a disease of the district, is now spreading gradually. The number of people suffering from this disease increased from 316 in 1959 to 2,684 in 1969.

(iv) Leprosy

Prior to 1948, there was no arrangement for systematic survey and treatment of leprosy in the ex-State areas of the district except Talcher. At present there are two Leprosy Control Units located at Dhenkanal and Talcher. For survey and treatment purposes two centres have been established at Anlaberini and Odapada. Besides, 10 leprosy clinics are functioning at Bamur, Raniakota, Angapara, Basida, Kishorenagar, Nihalprasad, Bhuban, Gopalprasad, Chandipal, and Kantapal. In addition to these, 3 domiciliary treatment centres have been established by the Orissa State Branch of the Hind Kusta Nivaran Sangha at Athmallik, Sanda, and Ranjagola. So far, nearly 226,000 persons have been examined and 2,797 cases of leprosy have been detected in the district. Most of them are under treatment.

(v) Yaws

It is a common disease among the tribal folk of Orissa and is also prevalent mostly in the interior of Pal Lahara and Athmallik subdivisions of the district.

(vi) T. B.

T. B. cases are gradually increasing from year to year as seen from the preceding table. During 1962, only 335 persons were treated in hospitals as indoor-patients. In 1969, the figure rose to 1,855. But fortunately death due to this disease is negligible and most cases are cured by modern method of treatment.

(vii) Small pox

Incidence of small pox is not much in the district. During the last decade, only 12 persons died due to this disease, of which eight persons died in 1961, three in 1962 and one in 1967. There was a severe outbreak in 1957 which took a toll of 1,359 lives. "Its incidence in that year began to be felt from January and the casualties began increasing rapidly from April up to the end of September. The deaths in the months of May, June and July were as great as 206, 290 and 305, respectively. Worst affected in this epidemic were the police-station areas of Dhenkanal,

Sadar, Gondia, and Kamakhyanagar. In the succeeding year also as many as 576 persons died from small pox out of which in July alone the casualties were 204.”¹

(viii) Cholera

During the past 30 years, there was a severe outbreak in 1941 in Angul. Again in 1957, it took a toll of 731 lives. Only sporadic cases of death were reported during other years till 1962. Since then cases of death due to Cholera are absent.

148. Medical Institutions

The ex-States of this district had very limited number of dispensaries which were placed under the charge of Civil Hospital Assistants or Assistant Surgeons. The medical facilities provided in those days were very insufficient. Prior to 1948-49, the hospitals of Angul were kept under the administrative control of the Civil Surgeon, Cuttack. Up to 1949-50, Rairakhol was a part of Dhenkanal district with one hospital at Rairakhol and three dispensaries at Naktideul, Girishchandrapur, and Badmal. A few months after the merger, Badmal was converted to an Ayurvedic dispensary. In 1949, Rairakhol subdivision was separated from Dhenkanal district and was amalgamated with Sambalpur district.

The Civil Surgeon, Dhenkanal, was in dual charge of both the Public Health and the Medical Administration of the district till the post of the District Health Officer was created in 1951-52.

In the present administrative set-up, the Chief District Medical Officer (previously called Civil Surgeon) is in overall charge of the Medical and Public Health Department in the district. Under his control there is an Assistant District Medical Officer (Public Health), an Assistant District Medical Officer (Medical) and an Assistant District Medical Officer (Family Planning).

(i) Allopathic Hospitals and Dispensaries

There are 16 hospitals, 16 primary health centres and 15 dispensaries in the district. Besides, there is a Maternity Centre at Bhuban and a Maternity and Child Welfare Centre at Dhenkanal to take care of expectant and nursing mothers and new-born babies. Strength of beds in different hospitals vary from six to eighty-six according to their importance and population of the place. Each primary health centre has six beds. During 1969, these institutions were provided with 60 doctors, 26 nurses, 52 pharmacists, 9 health visitors,

¹. Census of India, 1961, District Census Handbook, Dhenkanal, p. 46

12 health inspectors, 56 Dais, and 12 auxiliary nurse-midwives. A list of hospitals and primary health centres, with their bed strength and location, is given below:—

Name of Hospital	No. of beds	Name of Hospital	No. of beds
District Headquarters Hospital, Dhenkanal	.. 86	Chhendipada Hospital	.. 6
Angul Hospital	.. 48	Purunakot Hospital	.. 8
Talcher Hospital	.. 24	Bhuban Hospital	.. 29
Pal Lahara Hospital	.. 14	Jarpara Hospital	.. 8
Athmallik Hospital	.. 12	Police Training College Hospital, Angul	.. 10
Hindol Hospital	.. 6	Deulbera Colliery Hospital	.. 9
Kamakhyanagar Hospital	.. 12	National Coal Development Corporation Hospital	.. 15
Handapa Hospital	.. 6	Talcher Thermal Station, Chainpal	.. 9

Name of Primary Health Centre	No. of beds	Name of Primary Health Centre	No. of beds
Anlaberini	.. 6	Khamar	.. 6
Banarpal	.. 6	Kosala	.. 6
Bantala	.. 6	Madhapur	.. 6
Biltikira	.. 6	Mathakargola	.. 6
Birasal	.. 6	Odapada	.. 6
Godibandha	.. 6	Parjang	.. 6
Kaniha	.. 6	Rajkishorenagar	.. 6
Khajurikata	.. 6	Sriramchandrapur	.. 6

In dispensaries, there is no provision for indoor-patients. These are located at Purunagarh, Rasol, Gopalprasad, Meramandali, Bhapur, Thakurgarh, Bajrakot, Kankadahad, Jiral, Biru, Jamardiha, Angapara, Gurusulai, Mahabirod, and Kumusi.

(ii) Ayurvedic and Homoeopathic Dispensaries

Ayurveda is also popular and is preferred by a large number of persons. At present, there are 11 Ayurvedic dispensaries in the district located at Gondia, Kantio, Joranda, Mahidharpur, Nihalprasad, Gurusulai, Kiakata, Paiksahi, Mahabirod, Mahulpal, and Jharbeda. Each of these institutions is provided with a Kaviraj. The dispensary at Jharbeda is under the management of the Tribal & Rural Welfare Department.

The only Government Homoeopathic Dispensary has been established in the village Talmul since 1965.

The Director of Ayurvedic and Homoeopathic Medicines, Orissa, is the controlling officer for both Ayurvedic and Homoeopathic dispensaries.

(iii) Blood-Bank & Drug Shops

A blood-bank has been started at Dhenkanal in 1970. Its expense was met partly by the State Red Cross Organisation and partly from local contributions.

There are nearly 30 privately owned drug shops in the district managed mostly by retired medical personnel and pharmacists.

149. Family Planning

The Family Planning Bureau at Dhenkanal is in direct charge of the Assistant District Medical Officer, Family Planning. The primary object of this organisation is to encourage birth-control among the people in a scientific manner. There are 3 urban family welfare planning centres located at Dhenkanal, Angul, and Talcher. 16 rural family planning organisations are located in primary health centres and 7 static sterilisation units are located at Dhenkanal, Talcher, Angul, Kamakhyanagar, Pal Lahara, Athmallik, and Hindol. Besides, there are two mobile units, one for sterilisation and the other for intra-uterine contraceptive device. The former is in charge of an Assistant Surgeon and the latter is in charge of a Lady Assistant Surgeon. These mobile units carry out service camps in rural areas. There are two Family Planning Extension Educators and a Mass Educator and Information Officer stationed at the district headquarters.

The following table gives the achievement of family planning in the district since 1962-63.

Year	Vasectomy	Tubectomy	Intra-Uterine Contraceptive Device (Loop)
1962-63	.. 22	..	..
1963-64	.. 80	1	..
1964-65	.. 429	..	..
1965-66	.. 4,657	2	179
1966-67	.. 5,499	6	514
1967-68	.. 5,843	5	1,258
1968-69	.. 2,218	..	819
1969-70	.. 4,037	7	967
1970-71	.. 5,047	12	1,366

Vasectomy is a very simple operation and is much preferred to Tubectomy. The Loop was introduced in 1965-66 and nearly 5,000 females have adopted it till 1970-71.

Use of condom is the most popular form of birth control. The actual number of consumption in the district is not available as they are sold at a subsidised price in the market besides free supply at different family planning centres. The Family Planning Organisation distributed freely 187,000 condoms in 1970-71.

150. Sanitation

The office of the Assistant District Medical Officer (Public Health) was started at Dhenkanal since 1951-52 to look after the public health and sanitation both in rural and urban areas of the district. The subordinate technical staff consists of 24 Sanitary Inspectors, 50 Vaccinators and 15 Disinfectors.

In each of the 16 Community Development Blocks of the district, a Sanitary Inspector has been posted and is attached to the Primary Health Centres where both curative and preventive measures are undertaken. Besides, there is a mobile health unit with necessary equipments to provide medical facilities in rural areas.

The towns of Dhenkanal, Angul, Talcher, and Bhuban are considered to be the urban areas of the district. The Dhenkanal Municipality maintains its own health staff. The Notified Area Councils of Angul and Talcher are responsible for sanitation in their respective areas. A Sanitary Inspector has been posted to look after sanitation of Bhuban.

Unhygienic water-supply is mainly responsible for outbreak of epidemic and bowel diseases. For safe water-supply, a number of tanks have been protected. Wells and tanks are being excavated for supply of drinking water every year. In the past few years a pest called Amari (*Ipomoea crassicaulis*) is spreading in village tanks. Early attention is required to eradicate it.

Grama Panchayats also maintain sanitary condition in villages. Weed-ridden tanks, decomposed pools and other mosquito-breeding places are being cleaned. Water-seal latrines and smokeless *chulas* are gradually gaining popularity in rural areas.

The facilities of pipe-water have been provided in the towns of Dhenkanal, Angul, Talcher, and Bhuban and in four villages of Bagadia, Kamakhyanagar, Kosala, and Hulurisinga at an estimated cost of nearly 38 lakhs of rupees.

151. Vaccination

Prior to 1948, there was no arrangement for regular vaccination except at the outbreak of an epidemic. Since the formation of the district in 1948, the system of regular vaccination has been introduced. Additional Vaccinators are appointed to vaccinate on a mass scale if and when there is an epidemic. A large number of vulnerable groups of population are left out and this number goes on increasing year after year. The district has been divided into 5 zones and all the vaccinators in the zones are required to make a thorough census of unprotected persons and to vaccinate them.

In the past, vaccination was looked upon with aversion. Spread of education has made the common people conscious of taking precaution against the disease.

There have been no abnormal epidemics of either gastroenteritis or cholera in the district since 1948 except the calamity of Rantalai in 1950 (vide first page of the chapter). Necessary preventive measures like anti-cholera inoculation, disinfection of houses, chlorination of water sources are being undertaken to check the spread of the diseases. Facilities for treatment of cases are available in hospitals and dispensaries.

The table below shows the number of vaccinations, re-vaccinations and inoculations in the district from 1961 to 1969:

Year	No. of Inoculation	No. of Primary Vaccination	No. of Re-Vaccination	Total No. of Vaccination
1961	53,774	19,223	71,133	90,356
1962	60,581	16,628	45,319	61,947
1963	54,746	23,369	56,912	80,381
1964	35,142	30,285	171,113	201,398
1965	62,858	22,594	59,945	82,539
1966	426,972	33,544	113,913	147,457
1967	195,293	33,229	143,384	176,613
1968	559,707	96,109	162,526	285,635
1969	161,913	68,198	75,650	143,848