#### CHAPTER XVI

#### MEDICAL AND PUBLIC HEALTH SERVICES

The climate of a country is largely dependant on the lie of the land. In the subdivisions of Khondmals and Baligurha, thickly wooded high hills running in all directions, extensive marshes growing paddy, deep and dense jungles with a soil charged with decaying vegetable matter, under a cover of luxuriant vegetation almost impenetrable to light, heat and air, and with profuse subsoil moisture, all combine to produce a most unhealthy climate. Its evil influences, in the past, marked almost every constitution, and a new comer must pass through a trying ordeal of repeated attacks of high fever before he could find rest. His constitution by that time was throughly broken; he looked half of his former self and despaired to regain his vigour and spirit as long as confined in this dreadful hole. Service in the Khondmals was reported to be considered as almost equivalent to a death sentence by the people of the plains due to its unhealthiness and outsiders dreaded to visit it. The Boudh subdivision, is, however, more open and better watered and has a relatively better climate. But this tract was in the past frequently visited by severe outbreaks of cholera.

The general level of Khondmals is well within the fever zone, and malaria was prevalent. It was the commonest disease and claimed the largest number of victims, either directly or through the many complications which resulted from frequent attacks of it. No one, it is said, escaped it, not even the Khonds and there were very few constitutions that could withstand its attacks. The drainage of this subdivision is excellent, all the surplus water being rapidly carried away by the large streams into the plains of Boudh. Some of the hill tops, moreover, are distinctly above the ordinary zone of cloud and mist, and would probably be found to be less unhealthy than the valleys.

But today, there has been a spectacular change in the situation which may largely be attributed to the improvements wrought in the fields of medical and public health facilities in the district.

Excepting the Boudh subdivision which is plain country, the other two subdivisions of Khondmals and Baligurha are mostly covered with hills and forests. The majority of the inhabitants of the district constitute the Scheduled Tribes and the Scheduled Castes population. They were socially, economically and culturally most backward. The people being mostly illiterate were naturally unaware of the simple principles of hygiene and sanitation. Neither any public health measures seem to have been undertaken nor any medical institution established in this part of the country before the present century.

Climate

SURVEY OF PUBLIC HEALTH AND MEDICAL FACILITIES IN EARLY TIMES

system and witchcraft were generally prevalent. Avurvedic The latter was largely popular among the tribal people. Even today it is not totally extinct among them. Dreadful diseases like cholera and smallpox and for that matter any ailment were usually attributed to the wrath of the deities. The treatment of the disease, therefore, was usually conducted through propitiation of the deities according to the prescriptions of the witch doctor. In the early part of the present century vaccination against smallpox was introduced in the area. Although initially there was strong prejudice against vaccination, it gradually became popular. In about 1907-08 there were three charitable dispensaries located at Boudh, Phulabani and Balandaparha. The dispensary at Boudh had a small indoor ward and relief ward for indigent pilgrims. It was in charge of a Civil Hospital Assistant and in the above year the number of outdoor patients treated was 6071, and 27 indoor patients were admitted. The other two dispensaries afforded outdoor relief only.

VITAL STATISTICS—REGISTRATION
SYSTEM

Vital statistics were not being regularly collected in the ex-State of Boudh prior to its integration with Orissa. But the other two subdivisions, excepting certain agency areas, had this registration system from an earlier period. After the merger of the Boudh State an arrangement was made from July, 1948 for the collection of weekly figures of attacks and deaths from cholera and smallpox with a view to taking preventive measures against epidemics. But the Bengal Births and Deaths Registration Act, 1873 was, however, enforced in Boudh as well as in the entire district from 1952. The village Chowkidars, according to the system, were to collect information about births and deaths and to report them at the police stations. The officers in charge of the police stations consolidated the reports thus recorded for a month and sent the monthly returns to the Health Officer. In practice, however, the illiterate Chowkidars took this work carelessly as an imposition on them rather than one falling within their legitimate sphere of duty and consequently neglected it more often than not. The Thana Officers presumably on account of their pre-occupation with the problems of law and order, did hardly check the accuracy of the reports. Thus the entire structure of vital statistics which was based on what was reported by the Chowkidars was apt to be far from accurate. Inadequacy of penal provisions in the Act and lack of interest of officials in charge added to the unsatisfactory working of the system.

Collection of vital statistics was started separately in Boudh town in 1959, two years prior to the formation of the Boudh Notified Area Council. Collecting agency was the Sanitary Inspector. He also sent the monthly returns of such events to the District Health

Officer. On receipt of these reports from both the Thana Officers and the Sanitary Inspector, the District Health Officer compiled and transmitted them each month to the Director of Health Services, Orissa.

With a view to obviate the defects in the system as stated earlier, various attempts were made. The procedures adopted in the Orissa Grama Panchayat Act, 1948, and 1964 and in the Orissa Grama Rakhi Act, 1967 failed to bring about any improvement in the system. The abolition of the Chowkidari system in 1965 has largely affected the old system of collection.

The Registration of Births and Deaths Act, 1969 (no. 18 of 1969) and the Rules framed thereunder were enforced in the district on the 1st April, 1970. The Grama Rakhis are still reporting the information although separate provisions are made in the Act in this regard. The Officer in charge of the police stations and out-posts for rural area and the Health Officer/Executive Officer of the Municipality/N. A. C. areas are appointed as Registrar of Births and Deaths in respect of the areas under their jurisdiction. The Chief District Medical Officer and Additional District Medical Officer (Public Health) are appointed as District Registrar and Additional District Registrar of Births and Deaths respectively while the Director of Health Services acts as the Chief Registrar. The responsibility to make reports about the births and deaths devolves according to the provisions of the Act, on the head of the house or household. The Act provides for penalties 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, etc,. are made responsible to notify about births and deaths.

The vital statistics for 8 years from 1969 to 1976 are furnished in Appendix I. The figures pertaining to the urban areas shown in the statement for the year 1969—1971 relate only to Boudh Notified Area Council while the same for the rest of the years relate to both Boudh and Phulabani. The death rate during the period, which is almost static, is much lower than the birth rate. The rate of infant mortality during these years, although fluctuates from year to year, is rather on the decline which may be attributed to the improvement in the Medical and Public Health activities including Maternity and Child Welfare Services in recent years. But no reliance can be placed on these figures since they are not unlikely to suffer from under reporting.

The figures in Appendix II manifest the principal causes of death in the district. These figures, however, are also not free from the defects of under reporting. Moreover, Grama Rakhi, the reporting agency, who is a non-medical personnel is likely to confound one cause

of death for the other. For instance, fever which is merely a symptom of a disease might have possibly been regarded as the general cause of death. The deaths reported to have occurred from cholera and smallpox in different years are also unreliable which will be seen later. From what the statistics indicate it can safely be concluded that fever, presumably malaria, is the single largest killer in the district.

DISEASES
COMMON TO
THE DISTRICT
Fever

Malarial fever was notoriously prevalent, especially in Khondmals. There was a popular saying among the Oriyas that for fever all Orissa made its salams to the Khondmals. It prevailed more or less in every year, the largest number of cases occurring in the rainy season and just after its close. The fevers most commonly observed were tertian and quartan. Remittent and continued fevers were also frequently seen, but malaria cachexia was almost unknown. Although malaria was common, the number of deaths among the local inhabitants due to malaria was not so great; the residents from other districts suffered far more.

Owing to the special measures undertaken in these days for eradicating it, the details of which are furnished later in this chapter, malaria was almost under control. But due presumably to the indolence induced by complacency on the part of the concerned department it has recently reappeared in the district, the testimoney of which is borne by the statistics furnished in Appendix III.

Typhoid occurs, but its incidence is not so great as is evident from the figures in Appendix III. Unlike malaria it was not probably largely prevalent in this area in the past.

Filaria also occurs, but its incidence has been seldom high. But in these days it is gradually tending to increase. No special programme was undertaken to control the disease except the survey which was conducted in 1975 in Boudh town only. The microfilaria and disease rates were 15·3 and 3·4 respectively. But no general conclusion can be deduced from the results of such a solitary survey.

Cholera

Sporadic cases of cholera occurred almost every year in the past and the disease seldom broke out in epidemic form. One of the serious outbreakes in Khondmals is reported to have occurred in 1900, when it made its first appearance for many years. It was introduced by persons fleeing from an epidemic in the adjoining area of the then Central Provinces and spread with appalling rapidity causing great mortality. But Boudh was frequently visited by severe outbreaks of cholera introduced by pilgrims from Puri travelling by the main road along the Mahanadi. For complete eradication of cholera different schemes were undertaken by Government at different times.

Present Government activities in regard to its control are described separately. The statistics given in Appendix III indicate that not a single soul has succumbed to it during the period 1959—1976.

Smallpox was a common occurrance in this part of the country in the past. It is a dreadful disease and was generally attributed to the wrath of the deities. Hence the patient was seldom given any treatment. Vaccination was introduced in the entire area comprising the district during the early part of the present century with a view to control the disease. Although initially the people were very averse to such vaccination, it became popular in course of time.

Smallpox

To secure complete riddance over the disease various measures are being undertaken in recent years much of which find place separately in this chapter. The statistics in Appendix III show that leave aside the question of death, not even a single case of smallpox was reported during the period from 1969 to 1976.

The people of Boudh were largely suffering from bowel complaints as described by Cobden Ramsay (1907-1908). Dysentery Diarrhoea

**Dysentery** 

and Diarrhoea were the common complaints owing to the supply of impure drinking water and the nature of the food commonly consumed. The food of the people consisted very largely of jungle products, such as, roots, fruits and fibres, many of which are harmless and form a substantial dietary as they obtain a large quantity of farinaceous substances; but when there was any scarcity they are taken without any mixture of rice or other food grains, and being eaten in large quantities brought on severe bowel complaints. Despite various medical and public health measures undertaken in the district in recent times the incidence of these diseases has paradoxically tended to increase greatly which is well borne out by the figures in Appendix III. The upward tendency may be attributed to the modern habits of attending the hotels and restaurants where hygienic principles are often woefully neglected. But fortunately the mortality from them has not relatively gone up which may be chiefly due to the improvements achieved in the field of medical science.

Yaws

Yaws is a malignant type of skin disease commonly occurring among the tribal people. The hill tribes of Boudh-Khondmals were once largely suffering from yaws. Sequel to functioning of the Antiyaws Programme in the district a few years back, a brief account of which has been separately furnished, the incidence of this disease has been considerably brought under control. The sporadic cases which

occur at present are treated in the existing hospitals and dispensaries and warrant no special provision for treatment.

T. R.

The incidence of tuberculosis in the district of Boudh-Khondmals is fairly large. Air being the principal medium of contagion, this disease is likely to spread easily among the people in these days of unrestricted rail and road journeys. Special provisions for control of this disease and treatment of the patients have also been made. A detailed account of such arrangements has been given separately. The figures in Appendix III indicate a general picture with regard to the annual incidence and mortality due to this disease during the period 1969-76.

Among other diseases commonly occurring in the district mention may be made of leprosy, respiratory disease, skin disease, venereal disease, influenza, anaemia and mal-nutrition.

PUBLIC HOS-PITALS AND DISPENSARIES

Organisation of Medical Department

In the early part of the present century there were only three dispensaries located at Boudh, Phulabani and Balandaparha. Prior to the formation of the district of Boudh-Khondmals the medical institutions in the ex-State of Boudh maintained by the erstwhile ruler of the ex-State while those located in the subdivisions of Khondmals, and Baligurha were looked after by the Civil Surgeon, Ganjam. The Public Health activities and Medical Services of the district after its constitution in 1948 were under the charge of a district Health Officer and a Civil Surgeon respectively with their headquarters at Phulabani. Under the present organisational pattern the Civil Surgeon has been re-designated as the Chief District Medical Officer (CDMO). Under him there are three Assistant District Medical Officers, one in charge of the Medical, the other in charge of the Family Welfare and the third in charge of the Public Health organisations of the district. In addition to the above, the Chief District Medical Officer is assisted by a number of Assistant Surgeons including lady Assistant Surgeons, and many other technical and non-technical staff. Besides his normal routine duties of administrative nature, the Chief District Medical Officer also functions as the District Registrar under the Registration of Births and Deaths Act, 1969 and as the local food authority under the Prevention of Food Adulteration Act, 1954.

After the formation of the district a number of medical institutions were established in the district with a view to extending medical and Public Health facilities. By the end of 1977 there were in the district as many as 7 hospitals, 13 dispensaries and 15 Primary Health Centres besides 4 Medical Aid Centres, two Special Hospitals and one Private Hospital.

Thus the total number of medical institutions came to 42 including the private hospital. A list of such institutions with their date of establishments, number of staff and strength of bed, etc., is furnished in Appendix IV. Detailed descriptions relating to some of the important institutions including the District Headquarters Hospital have been furnished separately. The hospitals at Kotagarh and Belagarh and the dispensary at Durgapanga are managed by the Tribal and Rural Welfare Department\*; and all other institutions, excepting the private one, are managed by the Health Department. The police hospital and the jail hospital are managed by the respective departments. The total number of beds available for accommodation of the patients in all the hospitals including the private hospital comes to 385. The Primary Health Centres which are just miniature hospitals with accommodations for 6 indoor patients have been established with a view to provide medical facilities especially in the rural areas.

The District Headquarters Hospital, Phulabani, was established in the year 1948. It is directly under the charge of the Additional District Medical Officer (Med.). He is assisted by 16 Assistant Surgeons, 3 Health Visitors, 22 Nurses, 5 Pharmacists, 3 A. N. Ms., 2 Dais and 13 technicians. The hospital provides accommodation for 103 patients, 58 for male and 45 for female. The seats are allocated among various wards like medical, surgical, labour, Paediatric, infectious, etc. In addition to the pathological laboratory, facilities like Blood Bank and X-ray are available in the hospital. It has separate clinics for T. B. patients and Family Welfare. Treatment of anti-rabic cases are undertaken in the hospital. Specialist services in the departments of surgery, paediatric, medicine. E. N. T., eye and abstetric and gynaecology are made available. Attached to the hospital there is an A. N. M. Training Centre which has been dealt separately in this chapter. During the year 1977, over 0.46 lakhs of indoor and 1.21 lakhs of out-door patients with daily average of 127.8 and 329.7 respectively were treated in the headquarters hospital.

District Headquarters Hospital

The Subdivisional Hospital, Boudh, was originally founded in the year 1916 by the ex-ruler of Boudh. It was later converted into the Subdivisional Hospital in 1948 after the formation of the district. It is in charge of the Subdivisional Medical Officer who belongs to the cadre of Junior class I service. The principal staff of the hospital consist of a Lady Assistant Surgeon, 2 pharmacists, 3 nurses, and 2 technicians. The Subdivisional Medical Officer works under the supervisory control of the Chief District Medical Officer, Phulabani. The hospital provides accommodation for 30 indoor patients. Facilities for X-ray, patholological examinations and for treatment of anti-rabic (A. R. V.) cases are available in the hospital. Attached to it are a Leprosy clinic, a T. B. clinic

Subdivisional Hospital, Boudh

<sup>\*</sup>The present Harijan and Tribal Welfare Department

and a Family Welfare clinic. The following table gives the number of in and out patients treated in the hospital during the period from 1973 to 1977.

Year	In-do	oor	Out-door		
i cai	No. treated	Daily average	No. treated	Daily average	
1973	6,351	17.4	64,028	175.4	
1974	7,665	21	<i>55</i> ,808	153	
1975	9,307	25.5	66,705	183.2	
1976	9,640	26.41	76,637	209.96	
1977	10,585	29	78,530	215.15	

Subdivisional Hospital, Baligurha The Subdivisional Hospital, Baligurha, was set up in the year 1890. The Subdivisional Medical Officer is in charge of the hospital. He is assisted by an Assistant Surgeon, 4 nurses, 1 Dai and 1 pharmacist besides other non-technical staff. It provides accommodation for 30 indoor patients, 22 for male and 8 for female. The hospital is provided with an X-ray plant. Anti-rabic treatment is undertaken in the hospital. During the year 1977, 9511 in-door and 50,696 out-door patients with daily average of 26 and 139 respectively were treated in the hospital.

D. A. V. Trust—A. N. M. Training Centre, Phulabani The Dayanand Anglo-Vedic Trust Auxiliary Nurse Midwifery Training Centre attached to the District Headquarters Hospital, Phulabani, has been functioning since 7th February, 1969. The main building of the Institute, the hostel building attached to it and the staff quarters have been provided by the D. A. V. Trust and the recurring expenditure on account of the stipend paid to the trainees, and staff salary, etc., are met by the Health and Family Welfare Department of the State Government. The Institute along with its staff consisting of two Public Health Nurses, two Sister Tutors, two Lady Health Visitors and other non-technical personnel are directly under the control of the Chief District Medical Officer, Phulabani. The present strength of the trainees is 72, and each of them gets a monthly stipend of Rs. 100.00. The duration of course is two years.

Ayurvedic and Homeopathic Institutions

Simultaneously with the development and spread of Allopathic system of healing, the State Government are also patronising other systems like homeopathy and Indian medicines consisting of Ayurvedic and Unani systems. The medical institutions under these systems are directly managed by the State Government and are under the administrative control of the Director of Indian Medicines and Homeopathy, Orissa, Bhubaneshwar.

Ayurvedic Institutions There is no Ayurvedic hospital in the district. There are, however, 11 Ayurvedic dispensaries functioning at Ambagan, Baghiaparha, Badabaraba, Dahya, Gochhaparha, Talagan, Adasikupa, Biranarsinghpur, Sudra, Budagurha and Badabanga. Each dispensary is in charge of a Kaviraj.

The number of homeopathic dispensaries functioning in the district at present is seven including one proposed to be opened in Gutingia in G. Udayagiri Block. These dispensaries are located in the villages of Madhapur, Ranipada, Lingagarha, Minia, Kusanga and Katringia. They have been established during the period from 1970-71 to 1977-78. Each dispensary is in charge of a medical officer who is assisted by one homeopathic assistant.

Homoeopathic Institutions

There are in the district two Maternity and Child Welfare Centres; one is located at Boudh and the other at Phulabani. The former centre has four sub-centres under it. In addition, eighteen Maternity and Child Health Centres are also functioning in the district which are managed by the Tribal and Rural Welfare Department. Besides, 45 sub-centres under the Primary Health Centres and 19 sub-centres under the Family Welfare Programme have been established at different places to render maternity and child welfare services.

Maternity and Child Welfare

Antenatal, post-natal and delivery cases are chiefly looked after in these centres. The staff also render domiciliary services to the nursing and expectant mothers. They also manage the baby clinics and render child health services.

The following statistical data will indicate the achievements made in the field during the year 1975-76 to 1977-78.

A _attata_		Achie	Achievements during				
Activities		1975-76	1976-77	1977-78			
Antenatal cases registered		6,568	7,832	8,569			
Deliveries conducted Institutional		573	682	759			
Domiciliary		3,137	3,958	3,851			
Post-natal cases registered		5,075	6,938	5,826			
No. of children registered		15,251	12,969	15,682			
Abortions conducted		72	78	75			
T. T. to expectant mothers		2,930	3,116	3,585			
D. P. T. to children (0-5 years)		438	9,681	10,568			
D. T. to children (6-12 years)		7,223	8,873	9,565			
Prophylaxis against anaemics							
Mothers		3,480	8,939	9,568			
Children		3,066	8,822	12,762			
Prophylaxis against blindness children.	in	33,389	15,752	11,801			

PRIVATE-HOS-PITALS AND NURSING HOMES No 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 must be private practitioners of different systems practising both in rural and urban areas. The Moorshead Memorial Christian Mission Hospital at G. Udayagiri is a reputed privately managed hospital in the district. An account relating to this hospital is furnished below.

Moorshead Memorial Christian Hospital The Moorshead Memorial Christian Hospital was established in the year 1939. It is located on G. Udayagiri-Baligurha road at a distance of 2 km. from G. Udayagiri.

The affairs of the hospital are managed by a Managing Board. The Eastern Regional Board of Health Services, Church of North India, grants-in-aid from Government of Orissa and Central Social Welfare Board and service charges from the patients constitute its main sources of finance. The Medical Superintendent-cum--Acting Director is directly in charge of the hospital. He is assisted by a Nursing Superintendent. The staff chiefly constitute two medical officers, one Assistant Nursing Superintendent, two male and six female staff nurses, one pharmacist and one X-ray-cum-Laboratory Technician.

The hospital is housed in a fine building and is provided with water supply and electricity. There are four main wards; medical, surgical, gyaenic and maternity. The hospital also provides single rooms for accommodation of 10 patients. Its total accommodation of 100 beds is equally shared by male and female patients. The hospital is equipped with a X-ray plant, facilities for pathological examination and treatment of tuberculosis. Immunisation of small children against certain specific diseases is also undertaken in this hospital.

The number of patients treated in the hospital during the period from 1973—77 is furnished below.

Year		In-door	Out-door
1973		1,574	9,800
1974		1,989	7,533
1975	••	1,365	5,626
1976	••	1,159	5,872
1977		1,149	6,545

Family Welfare Programme, earlier known as Family Planning Programme, started functioning in the district in the year 1964. According to the present set up, there is one Family Welfare Bureau and a Post-Mortem Centre located at Phulabani, There are also 15 Rural Family Welfare Centres located in each of the 15 Block headquarters. A Mobile Unit, in addition, functions under the District Family Welfare Bureau. It conducts vasectomy/tubectomy operations and conducts follow up actions during its camps in rural areas. The Additional District Medical Officer (Family Welfare) is directly in charge of the Programme. He works under the control and supervision of the Chief District Medical Officer, Phulabani. The principal staff working in the District Welfare Bureau are Lady Assistant Surgeon (Mobile), Deputy M. E. I. O.S. Administrative Officer 1, Statistical Investigator 1, Computor 1 A. N. M. 1. At the Post-Mortem Centre, Phulabani, there medical officers including one Lady Assistant Surgeon, one Lady Health Visitor, one A. N. M. and two staff nurses. The Rural Family Welfare Centres are also suitably staffed.

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KNOWLEDGE
ON PUBLIC
HEALTH
Family
Welfare

Facilities for tubectomy/vasectomy operations, insertion of loop, and distribution of conventional contraceptives are available in all the hospitals and dispensaries of the district. Oral Contraceptive Centres are also established at Khajuriparha, Raikia, Tikabali, headquarters hospital, Phulabani, and subdivisional hospital, Boudh. Besides, Medical Termination of Pregnancy Centres are operating at Phulabani, Boudh Raikia, Baunsuni, and Manamunda for conducting lawful abortion.

From the time of the operation of the Programme in the district till the end of 1977-78, sterilisation operations were conducted on more than forty thousand males and four thousand females. Nearly sixteen thousand women also took I. U. C. D. during this period. In addition, a large number of conventional contraceptives like condum, diaphragm, foam tablets and jelly were distributed.

The Expanded Nutrition Programme was taken up in the State in 1959. Tikabali Block was covered under the programme in the same year. Nine of the 15 Blocks of the district have so far been covered by the programme.

Nutrition Programme

This programme is implemented through both the Department of Health and Family Welfare, and Community Development and Social Welfare. It plays an important role in the promotion of health and prevention of diseases among the most vulnerable groups of the society. It affords an effective field service in improving the food habits of the people. Through nutrition education and practical demonstration in the field, it seeks to instil the simple principles of nutrition among the masses.

In 1974-75, the State Nutrition Division undertook a Dietary (food consumption) and Nutrition Assessment Survey in the village Kanjamendi under the Nuagan A. N. P. (Applied Nutrition Programme) Block. Ten families of the village were covered under food consumption survey. The school students and the Mahila Samiti members of Kanjamendi, Nuagan and Jugapadar were examined for their nutritional status. 468 beneficiaries of different age groups were also covered under nutrition assessment. In the month of December 1975 the Lady Nutritionist of the State Nutrition Division imparted education on nutrition to the members of the Yubak Sanghas, Mahila Samitis and the teachers through practical demonstration in the symposium conducted by the Block Development Officer, Nuagan. Besides, the feeding centres in the district under special Nutrition Programme are supervised through the Nutrition Division.

Health Education Scheme The Health Education Officer is in charge of the Health Education Bureau, Bhubaneshwar. The Bureau undertakes publicity and Health Education work in the field through the Chief District Medical Officer. The scheme includes within its sphere of operation observance of some occasions like the World Health Organisation Day on the 7th April, National Malaria Eradication Programme Week, Anti-Leprosy Week, Children's Day, etc., in the district every year. Besides, Health Education matters like control of communicable diseases, environmental sanitation, utility of safe drinking water supply, drainage, disposal of garbage, etc., is imparted to the rural folk by the para-medical personnel.

Prevention of Food Adulteration The Orissa Prevention of Food Adulteration Rules, 1959, came into force throughout the State including the district of Boudh-Khondmals from 1960. It chiefly aims at preventing the evils of adulteration in food stuff.

Earlier, the Health Inspectors were declared as authorised Food Inspectors for the purpose of the Act which continued till 1966 when such powers were withdrawn from them and vested in the Additional District Medical Officer (Public Health) and Chief District Medical Officer of the respective district. But since 1974, according to a new scheme, 20 wholetime Food Inspector posts were created for the State. The Food Inspector appointed for the district is posted under the Chief District Medical Officer, Phulabani. In addition, the Additional District Medical Officer (Public Health) also functions as a part-time Food Inspector. The Food Inspector is assisted by one Sanitary Inspector. He is chiefly responsible for the implementation of the provisions of the Prevention of Food Adulteration Act. He ensures prohibition of the sale of adulterated and misbranded food articles to the public. He draws suspected food samples for chemical analysis and records prosecution

against the offenders. He is endowed with the power to seize and destroy food articles which, according to him, are not conducive to the health of the public.

In the following table is given the achievements made under the Act during the period 1974-77.

Year		Sar	nple	No. of adultera- tion detected
		Collected	Examined	
1974		11	9	1
1975	• •	46	42	3
1976		20	20	5
1977	• •	12	12	2

Prosecution is usually launched against all the cases, wherever adulteration is detected. The sanitation of the hotels and restaurants are ensured through surprise checks and through the activities of mobile courts.

The sanitary ideas of the people used to be very primitive. Their houses were mere huts, built close together and scarcely raised above the ground. They had no windows, and the doors were very low, so that even during the day-time the interior was extremely dark. These huts were not, however, ill-ventilated, as free flow of air was secured by a small scale left between the thatch and walls. The interior was kept clean and tidy, and the floors and walls were regularly plastered with cowdung and mud; but the surroundings of the houses were filthy, accumulations of cowdung and dirt being found close to every house. The village sites were also frequently low-lying; being near a marsh or on the same level with it; during the rains they were flooded and streams might be seen flowing through the main streets.

The people obtained their supply of drinking water from three sources, viz., tanks, wells and hill streams. Most of the tanks dry up in the hot weather or become very shallow. The villagers and their cattle bathed in them and consequently their water got polluted. The water obtained from the wells was also frequently impure, as no

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steps were taken to protect them from surface contamination and washing from the villager's homestead found their way into them. The hill streams are invariably small, and though they swell in sudden freshets during the rains, they become shallow after a few hours. In the hot months they dry up entirely and the people obtained their water from small pits in their beds. In order to improve the water supply Government have sunk many masonry wells.

Administrative set up The Assistant District Medical Officer (Public Health), according to the present set up, is directly in charge of the Public Health Organisation of the district. He works under the supervisory control of the Chief District Medical Officer and is assisted by two Assistant Surgeons, designated as Assistant Health Officer and Medical Officer respectively; and a Mobile Field Hygiene Unit, besides a large number of para-medical personnel.

Activities of Health and Sanitary Organisation

The Health and Sanitary Organisations in the district chiefly aim at preventing and controlling of communicable diseases, providing protected water supply and drainage system, and the performance of various other duties relating to environmental sanitation etc. The para medical personnel like Sanitary Inspectors, Health Assistants and Vaccinators while visiting the rural areas in course of their duties usually give Health Education regarding environmental sanitation and personal hygiene. Advantages of the use of Barapali latrine, smokeless Chula and safe drinking water are high-lighted. In the urban areas of Phulabani and Boudh, the respective Notified Area Councils maintain their general sanitation. The drinking water sources both in urban and rural areas are periodically chlorinated by public health staff. the

Achievements made under various schemes/projects undertaken in the district for controlling different diseases are described below.

Cholera Control Programme As stated earlier outbreak of cholera almost every year was a regular feature of the district in the past. But owing to the operation of the cholera control programme for the last few years its incidence has been greatly checked. The programme works under the guidance of the Additional District Medical Officer (Public Health). The Medical Officers of the Primary Health Centres are directly in charge of the programme. Each of the 15 Primary Health Centres of the district is provided with a Sanitary Inspector and a Disinfector. They are responsible for taking preventive as well as remedial measures against the disease.

The following table indicates the measures taken and the degree of success achieved under the scheme during the period 1973—77. Not a single case of cholera was reported during the period.

Year		Cas	ses	No. of	No. of d	Contact treat- ment	
icai	-	Repor- ted	Death	inocula- tion - perfor- med	tion made  Wells Houses		
1		2	3	4	5	6	7
1973				52,513	5,980	205	
1974		• •		4,14,050	31,625	640	47
1975		• •	••	10,45,273	38,023	719	• •
1976				6,99,134	59,788	7,625	• •
1977	• •		• •	1,47,995	15,055	347	47

Not unlike other parts of Orissa, smallpox had been regarded as a formidable disease in this part of the country from early times. It used to claim a large toll of human lives every year. In the early part of the present century vaccination against smallpox was not only introduced in this area but also all possible steps were taken to popularise it. Later in 1961-62 mass vaccination campaign was undertaken in the district under the Smallpox Eradication Programme. The activities of the programme continued until 1970-71, when it was replaced by the National Smallpox Eradication Programme with the object to completely stamp out the disease. It initially undertook primary vaccination of all the new-born, and re-vaccination of each adult individual once in every three years. Later since 1973 the previous method was superseded by door to door surveillance of smallpox and containment of its outbreak.

National Smallpox Eradication Programme

The Additional District Medical Officer (Public Health) is responsible for the efficient implementation of the programme in the district. He is assisted by the Medical Officers of the Primary Health Centres. There are 64 vaccinators and 15 S. E. P. Supervisors (Sanitary Inspectors) posted in the Primary Health Centres. Besides, there are two Para Medical Assistants, one at Phulabani and the other at Baligurha, who supervise the performance of vaccinators and S. E. P. Supervisors (S. I.) under their jurisdiction. Between the field staff and the higher officers they serve as the connecting link. During the outbreak of

smallpox the Para Medical Assistants organise and supervise the containment activities in the field of operation. The Mobile Squad, consisting of 5 vaccinators stationed at the district headquarters, is commissioned into service during epidemics and special campaigns.

The achievements made under the programme during the period 1973—77 are furnished in the following table.

Year	Cases			nation ormed	Active search for smallpox			
2	Repor- ted	Death	Primary	Revacci- nation	·			
1	2	3	4	5	6			
1973	• •	• •	25,306	1,99,907	2 rounds village to village			
1974			22,039	1,25,464	2 rounds door to door			
1975		• •	17,727	1,71,040	7 rounds door to door			
1976		• • •	24,018	2,23,352	4 rounds door to door			
1977	••	• •	20,628	1,02,943	1 round door to door in inaccessible areas only			

The last outbreak of smallpox in the district was reported in Podikia village under Daringbarhi Primary Health Centre in the year 1968, since when it is free from the disease. The district was formally declared free from smallpox by the International Assessment Commission on smallpox on the 23rd April, 1977. Prior to such declaration an intensive search for the disease was conducted in the district.

Malaria Contro! The District Malaria Unit with its headquarters at Phulabani has been in operation in the district since 1962-63. The District Malaria Officer is directly in charge of the Malaria work. He works under the supervisory control of the Chief District Medical Officer and is assisted by one Assistant Malaria Officer and a large number of other personnel like Centre Inspector (Malaria), Surveillance Inspector, Surveillance Worker, etc. For proper administrative control and efficient work, the district is divided into 8 centres with a population between one to one and a half lakhs each. Similarly each centre is divided into 3 to 4 sectors, and the sector into 4 to 5 sections.

At present fortnightly surveillance operation is being carried out in the entire district. During transmission period from May to September two rounds of spray operations (D. D. T) are also done. With a view to taking prompt action against fever cases, a large number of Treatment Depots/Drug Distribution Centres are also functioning.

In the following table is given the year-wise activities of the Malaria Control Programme during the year 1975 to 1978.

Van	Su	irveill <b>anc</b> e c	peration	Spray operation					
Year	No. of	Blood sme	ars		Radical No. of holdings spra				
	Collected	Examined	Found positive	Treat- ment given	1st. round	2nd round			
1	2	3	4	5	6	7			
1975	87,296	87,296	20,216	18,639	76,017	42,309			
1976	1,50,164	81,619	20,745	17,241	77,768	50,023			
1977	1,31,842	61,448	11,899	11,686	1,39,897	29,076			
1978	1,34,008	72,351	11,773	7,392	2,34,438	27,777			

The District T. B. Control Centre, Phulabani, came into being in the year 1968. Prior to this, there was only a T. B. Clinic with one medical officer, two Health Visitors and other non-technical staff. The B. C. G. Team which was then working independently was attached to the District T. B. Control Centre in 1973 to form its preventive wing. In the curative side, besides the T. B. Control Centre, there are also 15 peripheral institutions.

T. B. Control Programme

The District T. B. Officer is in overall charge of the organisation and works under the supervisory control of the Chief District Medical Officer. In discharging his responsibilities chiefly in the fields of preventive, diagnostic and theraputic activities and in apprising the higher authorities relating to the achievements made under the programme, the District T. B. Officer is assisted by various medical and para-medical personnel attached to the Control Centre, peripheral units and B. C. G. wing. Some members of the State viz., Treatment Organiser, the Health Visitors, the Statistical Clerk and the non-medical Team Leader of the B. C. G. team are trained at the National Tuberculosis Institute, Bangalore.

The T. B. Centre at Phulabani is the only organisation of its kind in the district. It has only 6 observation beds. The bacteriological, diagnostic and domiciliary treatment facilities are provided by the centre. In addition, the centre conducts mantoux test and B. C. G. vaccination of those who attend the clinic. The B. C. G. team while giving B. C. G. vaccination to 0-19 age group during their house to house visit, refer symptomatic cases to the centre for investigation.

In the following table is given the number of B. C. G. vaccinations conducted during the period from 1973 to 1977.

Voor		Rural	areas	Under School Programme			
Year		Registered	Vaccinated	·Registered	Vaccinated		
1	2 3		4	5			
1973		19,181	4,841	1,117	892		
1974		20,627	4,725	1,371	1,357		
1975		71,213	15,988	3,666	3,217		
1976		48,526	12,514	2,564	1,643		
1977		50,893	10,735	4,241	2,058		

The peripheral institutions which are classified as Microscopy Centre, Referring Centre and Sub-Centre are responsible for the diagnosis and treatment of T. B. patients.

The following table shows the year-wise achievements made under diagnostic and treatment fields from 1973—1977.

Year		No. of sputum exami- nation	No. of positive cases	No. of X-ray exami- nation	No. of pulmo- nary cases	No. of extra pulmonary cases	from	Total cases detected
1		2	3	4	5	6	7	8
1973		1,096	138	53	167	34	33	234
1974		1,701	145	55	167	8 <b>9</b>	37	293
1975	٠.	1,723	144	55	191	57	39	287
1976	••	1,749	203	73	248	97	38	383
1977	••	1,712	211	109	330	80	• •	410

The performance of the programme which was relatively better with the activities of the publicity unit has suffered a set-back after the abolition of the later since 1976.

No Leprosy Colony exists in the district. There is, however, one Leprosy Control Unit which was established at Baligurha in the year 1972. It is managed by a medical officer and some para-medical officers. Besides, there are 8 Survey, Education and Training (SET) Centres, located at Boudh (1975), Headquarters Hospital, Phulabani (1975); Manamunda (1975), Khajuriparha (1972), Belagarh (1966), Baunsuni (1972), Tikabali (1966) and Gresingia (1974-75). All these organisations together cover a total population of about 3.8 lakhs of the district. Each of the Survey, Education and Training Centres is in charge of one para-medical officer. The Chief District Medical Officer and the Additional District Medical Officer (Public Health) have supervisory control over these organisations.

Leprosy Control

The Hind Kustha Nivaran Sangha manages a destitute home in the district which provides accommodation for 25 children.

The leprosy organisations detected about 902 cases during the year 1976. Of these cases, 279 were under treatment. Similarly in the following year 1,079 cases were detected and of them 1,014 received treatment.

Yaws is a skin disease commonly seen among the tribal people. The Anti-Yaws Programme with the object to control the disease was in operation in the district during the period from 1972 to 1975. Over five hundred cases were detected on examination of nearly 3 lakhs of persons during the operation. After initial treatment of these cases special provisions were made for their prolonged treatment. The impact of yaws in the district today is well under control.

Anti-Yaws Programme

The administration of Drugs Control in the district of Boudh-Khond-mals was vested in the Drugs Inspector, Orissa, Puri Range, Bhubane-shwar until March, 1974. Thereafter it was transferred to the Drugs Inspector-II of the Ganjam and Boudh-Khondmals Range with headquarters at Bhanjanagar. The Inspector ensures the enforcement of the provisions of the Drugs and Cosmetics Act, 1940 and Rules framed thereunder. He draws samples of drugs for test from the hospital medicine stores and licensed premises with a view to prevent the sale of spurious, sub-standard, adulterated and misbranded drugs and records prosecutions where necessary. During the period from 1974 to 1977 about 40 licensed premises were inspected, 30 samples were drawn and 7 complaints were reported. Excepting five cases where show-cause notices were issued to the concerned offenders, no major action or prosecution was warranted.

Drugs Control School Health Service The School Health Service aims at preventing various diseases, physical defects and mal-nutrition among the school children of 0—14 age-group and thus protects them against future health hazards. The School Medical Officer examines the students at regular intervals and suggests remedial measures wherever defects are noticed.

Earlier, the district was under the jurisdiction of the School Medical Officer, Berhampur, until 1st January, 1976, when a new scheme was introduced. This scheme ensures thoroughness and regularity in examining the students both in primary and secondary schools and provides for follow up action in removing the defects noticed in the students.

Under the present set up different medical officers are held responsible for different schools. The Additional District Medical Officer (Public Health) renders health service in all the Boys' High English schools, while the Lady Assistant Surgeons are in charge of the Girls' High English schools and Middle English schools. The Boys' Middle English schools in each subdivision are looked after by the respective subdivisional medical officers. The Lower Primary and Upper Primary schools of each Block are under the medical officers of their respective Primary Health Centres.

Underground
Drainage and
Protected
Water Supply

Rural Water Supply Boudh and Phulabani are the only towns in the district having the status of Notified Area Councils. No underground sewerage system has yet been provided to these towns.

In the district of Boudh-Khondmals the problem of drinking water all the year round especially during the summer months assumes a large proportion. Out of the 4,397 inhabited villages 1,997 villages are without any drinking water well. Only 277 villages have been identified as suitable for sinking of sanitary wells and tube wells.

During the period 1975-78, although sinking of 718 sanitary wells was aimed at none could be completed due to dearth of funds. However, 12 out of the 17 open wells undertaken during 1976-77 were completed. These open wells were financed from the Chief Minister's Relief Fund.

Various schemes are in operation in the district to mitigate the difficulties of the people as far the supply of drinking water is concerned. During 1977-78, 88 tube wells under the Minimum Needs Programme and 56 tube wells under the Accelerated Water Supply Scheme were sunk. Besides, for installation of 75 tube wells with the aid of Central Government a list of villages has been finalised. Again 115 tube wells under the Minimum Needs Programme and 132 tube wells under the Accelerated Water Supply Scheme are to be installed during 1978-79.

Scarcity of drinking water is chronic with the headquarters town of Phulabani. It becomes acute in summer when the chief sources of supply, the Salki and the Pila Salki, dry up. The people chiefly resort to the only tank in the town and the *chuas* in the beds of Pila Salki and other low lands for their drinking water supply when the wells get dry. This characteristic malaise of the town is yet to be solved.

Urban Water Supply

The Piped Water Supply Scheme for Phulabani town was completed in the year 1963 with an outlay of 202 lakhs, but the supply was effected from July, 1962. The scheme is fed by the river Pila Salki. It was originally designed to cater to a limited population of 005 lakhs. But the population of Phulabani which is already above 010 lakhs, has long outgrown the capacity of the existing scheme.

Piped Water Supply Scheme of Phulabani Town

To combat drought situation in 1975 a temporary scheme was worked out at an outlay of Rs. 4.31 lakhs for Phulabani town; the Salki was its source of supply. Both the schemes supply at the rate of 72,000 gallons of water daily for 8 hours.

The capacity of the existing settling tank as well as the clean water pump is quite inadequate. So during rainy season the filtration or water treatment can not be made satisfactorily. With a view to extending the pipe line to the newly developed streets and to improve the capacity of the settling tank, clear water pump and the pumping units a new scheme has been initiated.

In addition to Phulabani, piped water is supplied to some important places of the district. The following table furnishes certain details about these schemes:—

Other Water Supply Schemes

Name of place	Popula- tion in 1971	Year of scheme	Daily sup- ply in gallons	Mode of supply	Source	Estimated cost in lakhs of Rs.
1	2	3	4	5	6	7
Baligurha	4,500	1964	21,600	30 stand posts	Hill Nulla	h 1,86
Raikia	4,300	196 <b>5</b>	43,000	24 Ditto		1,34
G. Udayagiri		1964	43,000	30 Ditto	• •	2,31
Tikabali	2,015	1967	60,000	24 Ditto		3,47
Boudh Town	8,091	1964	54,000	44 Ditto	Mahanadi	2,16

The Baligurha Water Supply Scheme largely suffers during the summer when its source: a hill stream, dries up. From April to June every year the water supply is totally discontinued. A new scheme with an estimated outlay of 10.47 lakhs is under Government consideration. The above difficulties will be overcome when it will operate. The Kodogo river which is at a distance of 7 km. from Baligurha has been selected as its feeder.

## BOUDH-KHONDMALS

## APPENDIX I

## Vital Statistics

		Birth				Death			No. of infant death		
Year	•	Rural	 Urban	Total	Rural	Urban	Total	Rural	 Urban	Total	
1		2	3	4	5	6	7	8	9	10	
1969			119	119		107	107		16	16	
1970		7,477	50	7,527	3,619	51	3,670	417	10	427	
1971		7,287	48	7,335	4,282	33	4,315	749	4	753	
1972	••	6,841	252	7,093	5,118	47	5,165	746	10	756	
1973		6,936	339	7,275	5,784	129	5,913	736	14	750	
1974		6,866	273	7,139	4,556	62	4,618	590	6	596	
1975		8,668	262	8,930	5,477	130	5,607	775	19	794	
1975		9,120	354	9,474	5,745	167	5.912	850	26	876	

	Birth rate per 100 population				rate per opulation		Infant mortality rate 100 live births		
Year		Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1	11	12	13	14	15	16	17	18	19
1969	 	1.42	1.42		1.27	1.27		13:45	13-45
1970	 1.26	0.57	1.25	0.61	0.59	0.61	5.58	20.00	5.67
1971	 1.21	0.24	1.18	0.71	0.17	0.69	10.28	8.33	10.27
1972	 1.11	1.23	1.12	0.83	0.23	0.81	10.90	3.97	10.66
1973	 1.11	1.58	1.13	0.93	0.60	0.92	10.61	4.13	10.31
1974	 1.09	1.22	1.09	0.72	0.28	0.71	8.59	2.20	8.35
1975	 1.35	1.13	1:34	0.85	0.56	0.84	8.94	7.25	8.89
1976	 1.40	1.47	1.40	0.88	0.69	0.88	9.32	7:34	9.25

# MEDICAL AND PUBLIC HEALTH SERVICES

## APPENDIX II

# Deaths from chief diseases for the period from 1969 to 1976

Year			Chole	ra		Smallp	xox		Fever			
1	Rural		Urban	Total	Rural	Urban	Total	Rural	Urban	Tota		
		2	3	4	5	6	7	8	9	10		
1969									41	41		
1970		10		10	<b>5</b> 6		56	2,156	26	2,542		
1971					43		43	3,145	10	3,155		
1972	٠.				25		25	4,154	20	4,174		
1973			5	5	30		30	4,681	30	4,671		
1974					17		17	3,965	8	3,973		
1975	. •	2		2				4,289	16	4,305		
1976		1		1				4,418	6	4,424		

Year	Dysentery a	nd Diarr	hoea	Respir	atory dis	eases	Injuries			
1041	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	
1	11	12	13	14	15	16	17	18	19	
1969	 	4	4		23	23		3	3	
1970	 213	4	217	91	3	94	56		56	
1971	 210	3	213	58	4	62	49	1	50	
1972	 212	1	213	67		67	40	2	42	
1973	295	17	312	49		49	49		49	
1974	 77		77	13		13	15	1	16	
1975	 264	6	<b>2</b> 70	67		67	59	6	65	
1976	 308	10	318	100	7	107	70	5	75	

Year		O	ther causes		All causes				
1001		Rural	Urban	Total	Rural	Urban	Total		
1	20	21	22	23	24	25			
1969	••		36	36		107	107		
1970		677	18	695	3,619	51	3,670		
1971		777	15	792	4,282	33	4,315		
1972		620	24	644	5,118	47	5,165		
197 <b>3</b>		715	82	797	5,779	134	5,913		
1974	• •	469	53	522	4,556	62	4,618		
1975	••	796	102	898	5,477	130	5,607		
1976	. •	848	139	987	<b>5,</b> 745	167	5,912		

BOUDH-KHONDMALS

APPENDIX III

Number of patients of different diseases treated and died in the Hospitals and Dispensaries

			E	ysentery		Typhoid				
Year		ســــــــــــــــــــــــــــــــــــ		Donah		In door		Out-door	In-door	Death
1		2	3	Death 4	5	6	7	8	9	10
1969		5,798	96		29,344	346	17	469	184	6
1970		4,581	131	1	30,649	414	14	758	187	4
1971		2,591	165	4	34,830	277	14	641	190	3
1972		3,315	185	8	32,050	285	7	659	217	8
1973		7,129	116		35,244	326	1	878	259	15
1974		24,755	759	11	30,173	321	9	211	192	12
1975		20,269	230	4	33,729	262	23	421	179	7
1976	z	37,509	387	8	54,826	653	27	954	233	7

			Yaws		; F	Filaria	-		Cholera	
Year 1		Out-door	In-door	Death	Out-door	In-door	Death	Out-door	In-door	Death
1969	• •	8	4	• •	721	11	· ·	• •	• •	• •
1970	• •	49	4	٠.	968	22	• •		• •	
1971		2	3		763	45	• .:		. ••	
1972	• •	12	3	. • •	740	26	1	••		
1973	••			••	740	9				
1974	• •	8	2		905	23		••	• •	
1975	••	21	5	1.	1,923	15	• •	• •		
1976	••	1		• •	1,325	50		• •	* *	

# APPENDIX III

		S	Smallpox			Т. В.		Tetanus			
Year	•	<u></u>	~_					<u></u>			
		Out-door	In-door	Death	Out-door	In-door	Death	Out-door	In-door	Death	
1		20	21	22	23	24	25	26	27	28	
1969		, .			1,100	271	13	25	26	7	
1970					1,539	318	16	38	21	6	
1971	٠.		••		1,860	323	15	15	33	15	
1972		• •			1,010	195	17	19	31	9	
1973	• •	• 1			917	312	19	43	29	5	
1974	<b>.</b> .		• •	1.	648	216	12	28	19	5	
1975	• •		••	· .	660	342	26	45	29	10	
1976					870	412	9	42	32	9	

			Cancer		н	eart disea	.ses	Other causes			
Year		C	_,,		~			~~~-			
		Out-door	In-door	Death	Out-door	In-door	Death	Out-door	In-door	Death	
1		29	30	- 31	32	33	34	35	36	37	
1969		2,729	81	2	1,763	33	2	419,779	5,729	148	
1970		735	261	3	954	56	3	469,848	6,094	159	
1971	٠.	812	151	1	1,753	152	9	429,157	6,032	197	
1972		101	34	. 1	810	74	11	399,344	5,380	146	
1973		18	23	1	561	60	3	450,998	5,826	127	
1974		18	11		487	99	7	443,280	6,762	140	
1975	٠.	32	14	٠	779	94	7	488,287	6,813	162	
1976	••	18	19	. 1	568	105	15	580,565	7,701	183	

APPENDIX IV

Name, Location, Year of Establishmennt etc., of Medical Institutions in Boudh-Khondmals District

Name and Location	Year of Establish- ment	N	umber c	of	No. of Bed			
		Doctors	Phar- macists	Nurses	Male	Female	Total	
1	2	3	4	5	6	7	8	
Hospitals								
Headquarters Hospital, Phulabani	1948	15	5	22	58	45	103	
Subdivisional Hospital, Boudh	1948	3	2	4	22	8	30	
Subdivisional Hospital, Baligurha	1890	2	1	3	22	8	30	
Government Hospital, Kantamal	1932	. 1	1		8	2	10	
Government Hospital, Godapur	1975	1	1	• •				
Tribal and Rural Welfare, Hospital Kotagarh	1959	1	1	••	4	2	6	
Tribal and Rural Welfare, Hospital Belagarh	1961	1	1		4	2	6	
Dispensaries								
Government Dispensary, Bisiparha	1959	1	1					
Government Dispensary, Bamuni- gan	1960	1	1	• •				
Government Dispensary, Balanda- parha	1934	1	1	••	••	••	••	
Government Dispensary, Ghanta- parha	1960	1	1		••			
Government Dispensary, Hara- bhanga	1958	1	1	••	••	••	••	
Government Dispensary, Indragarh	1968	1	1					
Government Dispensary, Possara	1958	1	1	••				
Government Dispensary, Puruna- katak	1946	1	1	• •			••	
Government Dispensary, Suduru- kumpa	1960	1	1					
Government Dispensary, Saranga- garh	1955	1	1	••			••	
Government Dispensary, Nuapadar	1972	1	1 .	••		• •		
Government Dispensary, Paburia	1975	1	1		• •	••		
Tribal and Rural Welare Dispensary, Durgapanga	1964	1	1	••	••	••	••	

Name and Location	Year of Establish- ment	Nu	umber o		No. of Bed			
		Doctors	Phar- macists	Nurses	Male	Female	Total	
1	2	3	4	5	6	7	8	
Primary Health Centres						· · · · · · · · · · · · · · · · · · ·		
Primary Health Centre, Baunsuni	1958	1	1	• •	4	2	6	
Primary Health Centre, Adenigarh	1966	1	1		4	2	6	
Primary Health Centre, Barakhama	1959	1	1		4	2	6	
Primary Health Centre, Brahmanpad	1965	1	1	••	4	2	6	
Primary Health Centre, Gumagarh	1960	1	1		4	2	6	
Primary Health Centre, Khajuri- parha	1961	1	1	• •	4	2	6	
Primary Health Centre, Manamunda	1958	1	1	••	4	2	6	
Primary Health Centre, Nuagan	1963	1	1		4	2	6	
Primary Health Centre, Raikia	1960	1	1	• •	4	2	6	
Primary Health Centre, Tumudi- bandha	1962	1	1		4	2	6	
Primary Health Centre, Tikabali	1959	1	1	••	4	2	6	
Primary Health Centre, Daringbarhi	1967	1	1	• •	4	2	6	
Primary Health Centre, Gresingia	1967	1	1	• •	4	2	6	
Primary Health Centre, Phiringia	1967	1	1	••	4	2	6	
Primary Health Centre, Subarnagiri	1964	1	1	• •	4	2	6	
Medical Aid Centres								
Medical Aid Centre, Kalinga	1970	1	1			• •		
Medical Aid Centre, Dhalapur	1974	1	1				••	
Medical Aid Centre, Kumbharkhol	1977		1			• •		
Medical Aid Centre, Kelamaha	1974	••	1	• •			••	
Special Hospital								
Police Hospital, Phulabani	1960	1	1	1	10		10	
Jail Hospital, Phulabani	1975	1	••	••				
Private Institution								
M. M. C. H., G. Udayagiri	1939	2	1	8	50	50	100	