CHAPTER XIII.
MEDICAL AND PUBLIC HEALTH SERVICES.
SURVEY OF PUBLIC HEALTH AND MEDICAL FACILITIES IN EARLY TIMES.

Regarding indigenous system of medicine the ***District Gazetteer of Manbhum*** by H. Coupland (1911) mentioned that the allopathic system of medicine and surgery had steadily gained popularity at Dhanbad and Jharia. He further mentioned that in the remote areas allopathic drugs were not commonly used, and the majority of the people consulted *Hakims* or the *Vaidyas* who practised the *Unain* or the *Ayurvedic* system of medicine repectively. The village *ojha*or the barber was also consulated and the treatment consisted in many cases of incantations, charms or the performance of *pujas* varied with the use of a few comparatively simple herble remedies, the knowledge of which in particular diseases had been handed down from father to son. The village barber used to make incisions.

Coup land mentions that starvation and abstinence from drink were ordinarily prescribed in cases of fever. Drugs like opium, camphor, nutmeg, myrobalan aloes, lime-juice, salt, vinegar, assafoetied, etc., used to be prescribed quite often.

The early British administrations introduce the allopathic system of medicine and surgery. Hospitals and dispensaries were opened in the urban areas first and than extended to the interior. With the introduction of Local Self-Government, maintenance of dispensaries came to be opened. There was a lot of antipathy on the part of the people to take to the modern system of allopathic treatment and it was difficult to push in an injection or to make an operation decade before. But now the craze is to get an injection for a quicker cure. There was a certain amount of encouragement to the indigenous system of medicals treatments, namely, *Kaviraji* and *Unani*. Thw system of Homoeopathy has more of a foothold in the urban areas since a very long time.

VITAL STATISTICS.

The system of registration of vital statistics in Bihar is regulated by the Bengal Birth and Deth Registration Act of 1873. Under this Act registration of vital statistics data is compulsory both in urban and rural areas of this State. There is also a provision for a very light penalty in this Act which may extend to five rupees for neglecting in giving the information to the collecting agents of registration of statistics. But the penal section is seldom resorted to. The result is that the incidence of under-reporting is very high.

In the rural areas, as well as in some of the urban areas, the ***village chaukidar*** collects the data of birth and death in his areas, and submit them to the thana officers on his respective parade day.

These thana officers are the Registration of Birth and Deaths for the areas under them according to the Bengal Birth and Death Registration Act of 1873. A parade day in thana is arranged so that every ***chaukidar*** pays a visit to the thana in the course of a week. The thana officers maintain the registers of births and deaths and compile the data obtained from the ***chaukidars*** and submit the statement once a month to the Medical Officer, Jharia Mines Board of Health. Every colliery submits a monthly return to the Chief Medical Officer of Health, showing the sickness, mortality, birth and death in the colliery areas. The scope of leakage is very large.

In the towns' birth and death the municipality and Jharia Mines Board of Health through the Health Visitors collect figures.

The Medical Officer of the Jharia Mines Board is the ***ex-officio*** Registrar of Birhts and Deaths for the whole of the mining settlement while the Sanitary Inspectors of the different circles function as Sub-Registration of Birth and Deaths of their repective circles.At places which are not the headquaters of the circle of Sanitary Inspecters, the Senior Health Overseer-cum-Vaccinator functions as the Sub-Registrar (vide Registrarof Birth and Death Act, Bengal Act IV of 1873. The Sub-Registrar also consult police records for verification further verify the reports locally, when they tour in their areas.

The Medical Officer of the Jharia Mines Board of Health sends the consolidated monthly vital statistics returns to the Director of the Bureau of Economics and Statistics. The Directorate of Economics and Statistics maintain the vital statistics of the State as a whole and submit the data to the Director General of Health Services, Government of India, New Delhi. Unfortunately, the system of collecting and reporting such vital statistics has many loopholes. There are hardly any checks. The civic sense of the public is not acute that a man should think it to be his duty to report a birth or a death. The agency's reponse may not be good. A pneumonia case may be recorded as fever.

The statement of vital statistics of the district excluding Chas and Chandankeary thanas from 1956 to 1961 has been given below:–

Years.	Births			Deaths		
	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7
1956 ..	**Not available**	**Not available**	**30,813**	**Not available**	**Not available**	**11,768**
1957	**6,324**	**5,899**	**12,223**	**2,422**	**1,869**	**4,291**
1958 ..	**5,795**	**5,306**	**11,101**	**2,489**	**1,861**	**4,350**

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1	2	3	4	5	6	7
1959 ..	**Not available**	**Not available**	**11,056**	**Not available**	**Not available**	**2,628**
1960 ..	**4,031**	**3,610**	**7,641**	**1,412**	**1,035**	**2,447**
1961 ..	**Not available**	**.. Not available**	**5,293**	**. Not available**	**.. Not available**	**1, 616**

IMPART CAUSES OF MORTALITY.

According to the returns submitted year by year by far the greatest mortality is said to be due to fever, but the ignorant ***chaukidar*** responsible for the returns is not an expert and he is prone to return, it may be most death a due to fever. After fever the greatest mortality is ascribed spreads over the district. Colliery and motor accidents claim a number of fatalities in this district.

The want of proper nutrition's diet, proper clothing in winter are main cause of infantile deaths. The main reasons for infantile deaths are the bowel troubles rickets, respiratory troubles, etc.

COMMON DISEASES.

The common diseases of the district are the same as one finds in the other parts of State fevers due to common cold influenza and respiratory diseases such as Bronchitis, Pneumonia, Dysentery, Typhoid, Tuberculosis, Leprosy and Venereal diseases. Dysentery cases are very common particularly in hot weather and also when the paddy seeding are planted. Malnutrition and Ankylostma infections are responsible for the high incidence of Dysentery. Cholera and Small-pox break out during the months of February and July though not always in epidemic form. Plague is not unknown. Blindness and leprosy can be listed as general infirmities amoung the people of this district though a few cases with other bodily infirmities also seen.

Cholera.

It is an endemic disease of this district. It generally breaks out during the hot weather but no particular season can be called a cholera season. The statement below will show the attacks, deaths and inoculations from 1950 to 1961. It has, however, to be mentioned that it is difficult to treat the statistics with confidence. The Medical Department could not furnish the statistic of attacks of cholera from 1923 to 1949 although they could show figurers of death. The inoculation figurers for these years were also not available.

*** The very fact that we could not get the recent 1961 fogures and some of the earlier figures will lead one to dobut it the figures could be accepted as all correct. (P.C.R.C.)**

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Cholera.

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Year	Attacks.	Deaths.	Inoculation.
1950 ..	1,367	659	91,880
1951 ..	410	233	69,574
1952 ..	217	89	1,09,857
1953 ..	143	51	1,18,026
1954 ..	164	42	94,740
1955 ..	Not available	214	80,183
1956 ..	156	56	Not available
1957 ..	149	66	3,59,755
1958 ..	155	64	6,53,027
1959 ..	150	40	Not available
1960 ..	Nil	Nil	4,42,938
1961 ..	29	16	3,86,400

Small-pox.

It seldom becomes epidemic in the district. It has been observed that it generally breaks out in the begining of October and November and lasts till June.

Vaccination is the antidote for the prevention of the disease. The District Health Office and the Jharia Mines Board of Health have the responsibility to carry on a ceaseless vaccination programme throughout the district. Vaccination is a statutory obligation but seldom there are prosecutions.

The table below shows the attacks and deaths from small-pox for the years 1950 to 1961.Here also the earlier figuers of attack were not available although the figuers of death were available: –

Year	Attacks.	Deaths.
1950	1,843	103
1951	1,108	282
1952	670	145
1953	77	14
1954	108	34
1955	Not available	Not available
1956	Not available	96
1957	Not available	160
1958	Not available	Not available
1959	77	13
1960	9	Nil
1961	10	4

- **The paucity of figures will naturally throw doubt (P.C.R.C.).**

If the figuers are correct they indicate that there has been a considerable decline in the of small-pox Vaccination and revaccination could completely control small-pox But people are still apathetic to take vacination.It has, however,to be mentioned here that the figuers of vaccination and revaccination are not many vaccinated persons took revaccination and how many death are from the section of the people that was revaccinated.

The recent statistics of vaccination and revaccionation supplied by the department are given below :–

Year	Primary vaccination.	Rrvaccination
1950	25,760	69,330
1951	26,591	1,29,665
1952	25,617	1,41,085
1953	21,396	1,86,409
1954	21,419	1,48,412
1955	Not available	Not available
1956	40,474	3,23,472
1957	26,593	1,45,938
1958	26,165	2,79,757
1959	22,465	2,36,619
1960	19,749	1,50,736
1961	22,236	2,25,767

Diarrhoea and Dysentery.

Dysentery is the most common disease in the district. Diarrhoea and other below complaints are not so very frequent.

The table below shows the incidence of death from 1950 to 1961: –

Year	Deaths.
1950	208
1951	142
1952	126
1953	119
1954	133
1955	129
1956	156
1957	221
1958	171
1959	130
1960	88
1961	141

The figuers fluctuate and it is a fact that figuers of deaths from the mofussil are seldom correct.

Plague.

It is now an uncommon disease. Only nine cases of bubonic plague were treated in Dhanbad Civil Hospital in 1948-49 out of which three patients expired. During the same tear four other cases were treated at the Chandkuiya Plague Hospital. There has been no outbreak of plague again.

Venereal Diseases.

Venereal diseaese are very common in the district. It is prevalent mostly in colliery areas of the district.

The following statement of the total number of cases treatment in different hospital under the Board supplied by Jharia Mines Board of Healthwill give some idea about the incidence of venereal diseases in the district: –

Kind of diseases.	1956.	1957.	1958.	1959.	1960.
Gonorrhoea ..	407	284	483	356	214
Syphilis ..	196	236	318	190	140
Other Venereal diseaese.	93	314	546	2,073	1,079

From the above statement it appears that the figuers are very fluctuating but they do indicate a high incidence. It has to be remembered that the hospital of the Jharia Mines Board do not treat all the venereal cases that come for treatment. The Sadar hospital gures are not available.

Other Infirmities.

Blindness and leprosy can be treated as general infirmities amongst the peopal though a few cases of other bodily infirmities are noticed.

The incidence of blindness is not so high but the number of leprosy cases both in rural and urban areas is very high. The arrangement for their treatment has been mentioned elsewhere.

The number of leporsy cases treatment in the Leprosy Hospital and Clinic of the district from 1950 to 1961 is given below: –

Leprosy.

Year.	Treated.	Cured.
1950	3,487	134
1951	3,434	105
1952	3,575	94
1953	3,236	97

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Year.	Treated.	Cured
1954	3,413	67
1955	2,013	90
1956	Not avaiable	Notavaiable
1957	1,611	85
1958	886	70
1959	501	63
1960	133	83
1961	142	91

From the above statistics it becomes clear that the incidence of leprosy has come down. The disease is common in Chas,Chandankiary and Jharia areas. Manycases do not go to the hospitals.

PUBLIC HOSPITAL AND DISPENSARIES.

Hospital and dispensaries in the district according to the line of treatment followed, may be said to be mainly of four types, viz., Allopathic, Homoeopathic, ***Ayurvedic***and ***Unani***. The number of Allopathic dispensaries is by far the largest. There is a Unani Hospital managed by the District Board and is situated at Nawadih.The oldest dispensaries of the district is at Patna opened in 1872 by Rani Hingan kumari which is now being managed by the Dhanbad District Board.

There are altogether 46 Allopathic Hospital and dispensaries functioning in the district, out of which 19 are run by the Government, 8 by the District Board and the rest by the Eastern Railway Jharia Mines Board of Health, Coal Mines Welfare Commissioner, etc. The following statement gives the details: –

Numbre of Hospital, Dispensaries, Primary Health Centres of Dhanbad District.

Name.	Agency of maintenance.
1. Katras Regional Hospital }	Coal Mines Welfare Commisioner.
2. Tisra Regional Hospital }	
3. Eastern Railway Hospital, Dhanbad and Health Unit. }	Eastern Railway
4. Eastern Railway Hospital, Gomoh.	
5. South-Eastern Railwal Hospital, Bhaga. }	South-Eastern Railway
6. Mudidih Hospital (private).	
7. Loyabad Hospital (private). }	Messer. Bird and co.
8. Kumardhubi Hospital (57 beds) (private).	

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9.	Kustor Hospital (private).	Raniganj Coal Association.
10.	Jamadoba Hospital (private).	Tata iron steel Co.
11.	Leena Macrae Hospital Bhowrah (private).	Eastern India Coal Co.
12.	Naraee Hospital (private).	Eastern India Coal Co.
13.	Maithon Hospital (private).	Damodar Valley Corporation.
14.	Chandkuiya Infectious Hospital (30 beds) (private).	Jhraia Mines Board of Health.
15.	Police Hosopital, Dhanbad	State Government.
16.	B. M. P. Hospital, Govindpur	State Government.
17.	Sardar Hospital, Dhanbad (121 beds).	State Government.
18.	Sindri Hospital	Sindri Fertilizer Corporatio, India, Limited.
19.	Central Hospital, Dhanbad (250beds)	Coal Mines Welfare Fund Organisation.
20.	Balliapur Dispensary ..	
21.	Jharia Dispensary	
22.	Keduadih Dispensary	
23.	Jorapokhar Dispensary	
24.	Jogta Dispensary	
25.	Sindri Dispensary	
26.	Govindpur Dispensary	
27.	Topchanchi Dispensary	
28.	Employee's State Insurance Dispensary, Kumardhubi.	State Government.
29.	Employee's State Insurance Dispensary, Mugma.	
30.	Employee's State Insurance Dispensary, Dhanbad.	
31.	Employee's State Insurance Dispensary,Chanch.	
32.	Employee's State Insurance Dispensary, Chota Ambona.	

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33. Nirsa Mangobinda Charitable Dispensary.		
34. Chirkunda Dispensary	..	
35. Tundi Dispensary.	..	
36. Rajgunj Dispensary	..	
37. Katras Disprnsary	..	
38. Baghmara Dispensary	..	State Government
39. Salukchapra Dispensary	..	
40. Chas Dispensary	..	
41. Gorh Raghunathmera Dispensary.	..	
42. Chandankiary Dispensary	..	
43. Nagarkiyary Dispensary	..	

The are no Nursing Homes, Public Health Research Centres and Mental Hospital in tne district

ORGANISATION.

There are two district sections so far as the administration of the Health Department is concerned. Broadly speaking one section is the preventive side which is known as the Public Health Department and other section is the curative side known as Medical Department. Previously there were two Directorates, one was known as the Directorate of Public Health under the Director of Public Health who had several deputy Directors and Assistant Directors and there used to be one District Health Officers at the district headquarters. The Directorate was under the Inspector-General of Civil Hospitals and under him there was the Civil Surgeon, the principal Medical Official at the district headquarters. For quite a long time the Inspector-General of Civil Hospital usually the senior most Indian Medical Service Officer available in the province was also the Secretary of the Health Department who controlled both the section as indicated. With the change of the policy of the Government the Secretary ship was taken away from the Inspector-General of Civil Hospital and given to an I.C.S. Officers.

With the expansion of both the department the number of gazetted doctors had enormously increased and it was increased and it was increasingly felt that there was overlapping and avoidable duplication work. It was also felt that both the departments would work better if the overall responsibility and supervision was vested in one and the same officer at the Government level and at district level also there should be one senior doctor who could be entrusted with both the preventive and curative sides. It is with this object hat the public health and the medical department was amalgamated abolishing the

post of the Inspector General of Civil Hospital and creating a common post of the Director of Health Services for Bihar.

The shift in the policy of the State had also its impact on the district organisation. In 1959, the post f a Civil Surgeon in the district was converted to that of the Senior Executive Medical Officer-*cum*-Civil Surgeon. Henceforth the Senior Executive Medical Officer-*cum*-Civil Surgeon was to be responsible for the efficient implementation, supervision and control of all public health measures preventive as well as curative.

Duties of the Senior Executive Medical Officers.

As mentioned the senior Executive Medical Officers is responsible for all medical work in the district both preventive and curative. He is assisted by the District Medical Officer of Health in respect of Public Health work.

He is Superintendent of all State Government hospital and dispensaries within his district. He is responsible for the supervision and inspection of all schemes of the Medical and Public Health section in this district. He is an *ex- officio* member of the District Board Sanitation Committee. The Senior Executive Medical Officer is also responsible for the enforcement of drug control measures and as such he can inspect any druggists' shop within the district. He is the authority to issue licenses for medical shops and also to cancel the same in case of non-observance of prescribed rules.

The Senior Executive Medical ***Officer-cum-Civil*** Surgeon visits the Sardar and Police Hospital at expected to inspect all the hospitals and dispensaries in charge of Medical Officer of the status of Assistant Surgeon in the district and all the hospitals at sub divisional head quarters at least twice a year.

He expected to scrutinise the expenditure of every hospital and dispensary in his district and guide the managing body.

The multifarious duties have practically made the officer more of an administrator and an Inspecting Officer. Almost everyday he has to attend a meeting at head quarters. If he has to inspect all the institutions in the mofassil under him he will have to be touring for quite a number of days in the week. By this arrangement it may be it may be that the public may be deprived of the skill of a good surgeon or a physician. The scheme has not worked very long to justify an appraisal. There is hardly any drug control or check on spurious doctors practicing.

Duties of District Medical Officer.

His services have been placed under the District Board and he is to give advice on the techincal matters concerning Public Health such as control of epidemics, vaccination,

sanitation, etc. He supervises the work of the subordinate public health staff, viz., Assistant Health Officers, Vaccinators, Disinfectors, who are the employees of the District Board. He seeks advice of the Senior Executive Medical Officer in every matter relating to public health and the latter is to report any case of default and management to the Government.

The Community Development Blocks have a static and mobile dispensary with three health sub-centres. The Blocks Medical Officers are responsible for both the preventive and curative medicines.

Mobile Health Centres.

Mobile Health Centres have been opened in eight Community development Blocks of the Dhanbad district to serve the rural areas.

There are twenty-four Mobile Health Centres in this district. There are three Mobile Heath Centres in each Block.

Each Mobile Health Centre of Community Development Blocks is run by one health Worker and a trained ***dai*** . As a preventive measure these centres disinfect wells and houses, g" e cholera inoculations, vaccinations, distribute milk powder and multivitamin tables free of cost. In each mobile centre outdoor patients are treated free of cost. The Medical Officer in charge of the Blocks attends the mobile centres twice a week and examines the patients and prescribes medicines.

Activities of the dispensaries of the Community Development Blocks of Dhanbad.

Each Community development Blocks Dispensary consists of a Medical Officer, a Sanitary Inspector, a Lady health Visitor, three Auxiliary Nurses or trained *dais* and an Auxiliary Health Worker.

The function of these dispensaries is to maintain a satisfactory incidence of health in the rural areas. Disinfection of wells, inoculation and vaccination are some of the preventive measure while the Block Doctor treats the patients at the Block dispensaries. There are some Blocks without a Doctor. Some of the Block Doctor have not got the proper cut to work with missionary zeal in the rural areas. Want of private practice is a damper to the Block Doctors. Private practice for the Government Hospital and dispensary doctors has been almost problem throughout the state and there is bitter complaint that the patients at the hospital and dispensries are neglected by the Government doctors who care more for their private practice.

Sadar Hospital, Dhanbad.

From July, 1908, this institution known first as the Dhanbad Civil Hospital was maintained was maintained by joint management of the Manbhum District Board, the Dhanbad Municipality and Jharia Mines Board of health. On the 15th July 1955, it was taken over by the State.

and since then it is functioning as the State Hospital. The hospital is fairly well equipped.

In the beginning, the hospital consisted of 16 beds with two infectious beds along with an outdoor dispensary. In 1962 there are 63 beds for males, 38 beds for females, 10 for children and 10 for T. B. patients. The hospital has now an operation treatre, an X-ray plant and a T. B. clinic. The hospital has five doctors including one lady doctor, seven nurses, five compounders and five dressers (1962).

The table below shows the number of patients treated between 1950 and 1961: –

Year	Indoor patients.	Outdoor patients.
1950	2,290	13,173
1951	2,098	13,372
1952	2,186	13,614
1953	2,355	14,854
1954	2,426	18, 667
1955	2,581	21,727
1956	2,672	23,679
1957	3,416	17,966
1958	3,608	19,419
1959	33,504	52,162
1960	41,245	60,590
1961	52,195	71,087
196 (up to October)	25,655	37,148

The hospital has served a useful purpose in spite of its limited scope particulary the fewer number of beds. The strength of the nurses is very poor. The hospital is located in congested place, i.e., just opposite the Course. There is not much space for expansion.

The Leper Hospital and Clinics.

The Leper Hospital and the Clinic are situated at Tetulmari about one and half miles away from Tetulmari Railway Station. It runs on public donations and aids from the State Government, Jharia Mines Board of Health, Dhanbad Municipality, District Relief Association, District Board and Coal Mines Welfare Organisation. The hospital was established in October, 1937 with 14 free beds and two cottages one for the paying patients, but the strength has been increased to 45 free beds and 12 paying cottages. The hospital has one Medical office with other staff.

There are a number of leper clinics at different places, viz., Dlianbad, Jharia, Tetulmari, Telmucho, Chirkunda, Pandra, Chas and Chandankiari. The Chief Leprosy Officer looks after these clinics excepting the last four which are in charge of the Civil

Surgeon. The incidence of leprosy is high. Purulia district which is the parent district of Dhanbad has leprosy almost all over now and the infection has apparently spread from there.

A separate T. B. Clinic Centre with a Medical Officer was opened in 1959 at the Dhanbad Sadar Hospital. There are three Health Visitors and one compounded under the control of the Medical Officer. The main duty of the Health Visitors is to give demonstrations and lectures among the people of different wards of the municipal areas. There are ten beds for T. B. patients attached to Sadar Hospital.

The following statistics from Dhanbad T. B. Clinic Hospital arc suggestive of a high incidence of this disease: -

Year.	Outdoor T. B. patients.			Indoor T. B.
	Old cases.	**New cases.**	**Total.**	**patients**.
1959	**11,215**	**1,847**	**23,062**	**7**
1960	**17,148**	**3,052**	**20,200**	**8**
1961	**6,135**	**2,070**	**9,205**	**10**
1962 (up to August).	**18,419**	***2,535***	**20,954**	**6**

There is scope for a sanatorium in a wooded spot. There is none now. The smog in the districts one of the main causes.

Eastern Railway Hospital, Dhanbad.

This hospital was opened in 1925 for the railway employees, their families and railway accident passengers. The District Medical Officer with a staff of 9 doctors and 20 nurses run the hospital. There are 61 beds out of which 30 are for males, 21 for females and 10 for the Maternity and Child Welfare Centres.

The Eastern Railway has smaller hospitals or dispensaries at Gomoh, Katras and Patherdih.

Central Hospital. Dhanbad.

This hospital was opened in 1951 to look after the welfare of the Central Government employees and their families. The hospital is very well equipped and has 250 beds. This is maintained by the Coal Mines Labour Welfare Fund (Central Government. There are a number of doctors including lady doctors and a fairly strong nursing staff. The details of the working of this hospital will be found in Industries chapter. This hospital, however, does not normally accept cases of persons other than colliery workers.

Kumardhubi Hospital.

This hospital was established in 1917 primarily for the employees of Kumardhubi Fireclay and Silica Works, Ltd., Eagle Re-rolling Mill. Ltd., and Engineering Works, with the

expansion of the township of Kumardhubi the hospital has also now beer' thrown open to the public as well.

It is a well equipped hospital with 57 beds, a Maternity and a Child Welfare Centre:There is a staff of three Medical Officers and Nurses, etc.

The table below supplied by the Chief Medical Officer shows the number of patients treated in 1962*:-

	Indoor.	Outdoor.
January	106	877
February ..	131	896
March	127	965
April ..	139	968
May ..	145	1,111
June ..	148	1,172
July	Not available.	Not available.
August ..	281	1,839
September	266	1,465
October ..	187	1,343
November	154	1,116
December	155	1,088

Jharia Mines Board of Health.

The Jharia Mining settlement has an area of 797 square miles. It consists of the whole of the Dhanbad district including the Dhanbad Municipality area but excluding a small area of about 10 square miles with 19 villages and the factory and the quarters of the Sindri Fertiliser and Chemicals, Limited, a major part of Chandankiary police-station area and the entire area of Chas police station. The details of the Board have been given elsewhere.

The main function of the Board .is to look after the sanitation and public health of its jurisdiction. The Board maintains an Infectious Diseases Hospital at Chandkuiya. There are 30 beds. **The number of patients since 1957 to 1961 is as follows:—**

Year.	Cholera.	Small-pox.	Other diseases	Total.	Patients cured and discharged.
1	2	3	4	5	6
1957	234	122	240	596	547
1958	88	261	404	753	655
1959	6	61	253	320	306
1960	Nil	80	338	418	392
1961	4	51	517	572	67

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There are 33 Maternity and Child Welfare Centres which ar looked after by the Jharia Mines Board of Health. These are divided into 10 circles. These centres are situated at Phularitand, Baghmara, Madhuban, Kharkhari, Katras, Chhlabad, Kankanee, Mudidih, Keshalpur, Pootkee, South Bulliany, Katchi Bulliany, Gansadib, **J** haria, Ena, Ghanoo(Iih, Bhowra, Jamadoba, Jeetpur, Tisra, Jeenagora, Lodna, Bhuli, East Busseria, Kusunda, Nayadih, Hirapur, Nirsa, Khas Nirsa, Mugrna, Badjua, Chirkunda, Laikdihdeep and Chanch. The current annual expenditure sanctioned for the year 1961-62 is Rs. 1,52,975 including Rs. 50,000 received from the Coal Mines Welfare Fund, The Board also receives grant for training of *dais* from State Government under UNICEF Scheme every year. There are a Maternity Supervisor, a Lady Medical Graduate with post-graduate qualifications in Maternity and Child Welfare, 10 qualified Lady Health Visitors, 6 midwives, etc., to look after the Centres.etc., to look after the Centres.

The statement of the work of the Maternity and Child Welfare cases at the 33 Maternity and Child Welfare Centres is as follows:—

Maternity cases.	1956.'Total atten dance.	1957.Total atton dance.	1958. Tota atten- dance.	1959. Tota *atten*- dance.	196O. Total attn dance,	1961. Total attendance.
1	2	3	4	5	6	7
Ante-natal	24,396	24,722	25,117	24.922	24,416	25,931
Post-natal	8,501	9,632	11,492	10,983	15,080	11,302
Infants	22,934	24,978	28,008	25,123	31,717	25,522

Statistics supplied by the Jharia Mines Board of Health.

Family Planning Centres.

Family planning is now being implemented in India to check the population explosion. The problem has been accentuated by scarcity of food, unemployment and other kindred problems.

There are Family Planning Centres run by the Central and State Governments at Dhanbad, Jharia, Sindri, Chandankiary, Chas, Topchanchi, Govindpur, Tundi, Nirsa, Baghmara, Balliapur and Gomoh. These Family Planning Centres are attached to National Extension Blocks of their respective areas. The figures of people attending the Centres are very small. A beginning has been made but no substantial work has yet been done.

Maternity and Child Welfare Centres.

To provide better care and medical attention to mothers in both pre-natal and post-natal stages and also to the infants from their birth up to a certain age, the first Maternity and Child Welfare Centre

was opened in 1930 in Dhabad which was functioning under the Jharia mines Board oaf Health. Number of such Centres increased to twenty – eight during 1954 in nine circles under the management of Jharia Mines Board of Health. These circles are Baghmara, Katras, Kenduadih, Jharia, Bhowrah, Bhuklanbarari, Tisra, Bhuli and Chirkunda. Each Centre is under Centre is under a Lady Health Visitor who is assisted by rtrained dais and midwives.

These Centres serve a population over two lakhs and are extended to about 146 collieries. In 1946-47 there was an expenditure of Rs. 25,840 only on this account. This has now increased to about a lakh of which Rs. 50,000 is received as grant from Coal Mines Welfare Organisation and Rs. 6,000 from the victoria Memorial Scholarship Fund, Bihar, for the training of dais. These Centres particularly serve the colliery employees. Ordinary labour cases are conducted by dais and whenever any medical help is required, the case is sent to the Central Hospital or to Dhanbad State Hospital.

The State Government have sponsored one Child Welfare and Maternity Centre at Dhanbad town. It is under the supervision of the Senior Executive Medical Officer. A Lady Health visitor, a midwife and a dai are posted at each centre. This centre is financed by the State Maternity and Child Welfare Bureau. The UNICEF also gives aid to these Centres in cash and kind such as milk, medicine, etc. the Centres also hold baby shows and distribute milk to the mothers and the children. They propagate necessary information for the well- being of the mother and the child.

SANITATION.

The senior Executive Medical Officer and the Civil Surgeon is in over all charge of sanitation of both urban and rural areas. Rural sanitation is the responsibility of the District Board. The District Medical Officer of Health is particularly put in charge of rural sanitation. He is under the control of the Senior executive Medical Officer and civil surgeon. In each subdivision there is an Assistant Medical Officer. The Sanitary Inspectors are under the Assistant Health Officer. There is one Sanitary Inspector and Vaccinator. On the average this unit is meant for every 30,000 population. This is extremely inadequate. There is provision for a Medical Officer in each Block of the district who is put in charge of the Health Centres. Some of the Blocks are, however, without a doctor. The Medical Officer is responsible for preventive side also. One Sanitary Inspector, three Health Workers and three daises are expected to be posted in each Block.

Urban Sanitation.

The municipality and the Notified Areas have the responsibility of looking after unban sanitation. The incidence of unban sanitation of Dhanbad, Jharia and Katras cannot

be said to be of a very high order. The municipality and the Jharia Mines Board of Health have their own problems of small finance, congested areas, slum pockets, small civic sense and slight popular response and habit to follow sanitary habits. The older portions of the urban areas are extremely congested. The new expansions have not always been on any plan. Sindri is an exception. Water-supply is still inadequate in most of the urban areas.

There is no underground drainage in Dhanbad town. The slum areas are scattered in the town.

Rural Sanitation.

The problem of drinking water is more acute in the rural areas. People use almost any source of water for drinking purposes. The problem becomes all the more acute during the summer season when these rivulets and tanks become dry. The Block authorities are sinking masonry wells. The Welfare Department is also working in this direction.

Sanitation in Coalfields.

Sanitation in coalfield areas was a problem before 1906 when the first Sanitary committee was formed for the collieries with the local Zamindars , Civil Sergeon, Medical Officer of Indian Mining Association and the Subdivisional Officers as members and the Deputy Commissioner of Manbhum as President. But the Committee had its limitations. In 1908 there was epidemic of cholera and the working of many collieries was brought to standstill.

The main cause of this epidemic was attributed to water scarcity. The bigger collieries spent lots of money over better water- supply and many of them introduced Jewel filter system. Housing problem of the labourers also received attention. Medical and conservancy staff were also increased. Many tanks were cleaned out and attention was also given for proper drainage for the coolie lines.

But still they could not check the epidemics as the smaller collieries with limited income could not spend much for conservancy and the disease primarily occurred in those collieries and ultimately became an epidemic. The neighbouring villages were also affected.

A general scheme to supply water to the entire coalfield was mooted and was gone into with come car but this also could not materialize for want of funds as the estimated expenditure was too high. The necessity for a legislation enabling the enforcement of ordinary sanitary rules, was felt. It became necessary to have power to compel the reservation of tanks and wells, to clear out congested areas and to enforce comparative cleanliness within the neighboring villages.

MEDICAL AND PUBLIC HEALTH SERVICES.

At last Jharia Mines Board of Health came into existence in the year 1913. With the expanding activities of the Jharia Mines Board of Health, gradually the whole of the coalfield area received a different look. The coolie lines were built with some regard to proper sanitation, drainage, etc. Each large colliery was compelled to have Medical Officer and hospital of its won in order to render first- aid to the patients of that colliery.

The collieries had to pay a cess of 100 tons of coal raised from their mines which varied every year. The cess for the year 1954 was Rs. 5-14-0 per 100 tons, which did not fall much upon the owners, and at the same time the Board benefits each and every colliery.

Sanitary measures taken during mela time.

Sanitation during fairs and melas has to be carefully watched and controlled to check epidemics. The weekly bazaars held in large villages and important annual fairs where there is a large assembly encourage to spread inrfectious diseases. Vaccination and inoculation against small- pox and cholera are given in fairs and melas. Popular talks are given to spread the knowledge of sanitation. The important annual melas of the district are held at Tundi, Dhanbad, Balliapur, Chas, Gobindpur and Jharia. These melas have to be watched.

AYURVEDIC AND UNANI DISPENSARIES.

The District Board of Dhanbad has opened nine Ayurvedic dispensaries at Jharia and other places.

There is Unani dispensary at Nawadih managed by the District Board. It cannot be said that these two indigenous systems are popular in the district.

HOMEOPATHIC SYSTEM.

This system has become quite popular because of the cheap medicines.

There are 5 Homoeo dispensaries managed be the District Board at Lowadih, Ghghra, Brahmandiha, Phularitand And Khamarbendi. Besides there are five subsidized dispensaries at Lodna, Magri, Matari, Deoli and Laghla. Each dispensary is under the charge of a Homoeopathic doctor who gets his pay from the District Board. There is no facility of indoor patients in these dispensaries.

ACTIVITY OF THE INDIAN MEDIFCAL ASSOCIATION, DHANBAD.

In the year 1938 a branch of the Indian Medical Association was started at Dhanbad. There were only 35 members when the branch was opened. Now (1962) the strength of the member of the Dhanbad Branch of the Indian Medical Association has increased to 154 members. The members of the Dhanbad Branch of the Indian Medical Association hold medical conferences annually. They deliver Lectures on medical problems. A health week is

also observed usually in the month of March when stress is given , for examination of the school boys are held and popular lectures are delivered. Sports and competitions are also organized. The mambershelp at the time of emergencies like outbreak of cholera, small –pox, etc.

WATER- SUPPLY.

To solve the water problem in the coalfields, the Jharia Water Board was formed in the year 1914 under the Jharia Water-Supply Act, 1914. A big dam- 375 feet long, 78 feet and 25 feet wide –was constructed at the foot of the hills near Topchanchi about five miles north from the Gomoh Railway Station by the side of the Grand Tunk Road. The construction work of the dam was taken up in the year 1915 and was completed on the 15the November 1924, when it was opened by His Excellency Sir Henry Wheeler, the then Governor of Bihar. It was constructed at an estimated cost of Rs. 50,00,000 with a capacity of storing about 1,15,00,000 gallons of water. It was capable of supplying water to the entire coalfield even if there had been drought for four successive years. But with larger demand, Topchanchi reservoir is not able to supply water during summer season and a second big reservoir was constructed at Tetulmari to preserve the excess water of Topchanchi during rains. Topchanchi water is supplied tocollieries door-to-door and even to the neighbouring towns and thus a big problem was solved.

The rate of cess charged from the collieries and public for the consumption of water is different.

The most of the collieries have pit-head-baths where labourers coming out of the mines after strenuous work can get themselves washed, refreshed before they leave colliery premises.

In many collieries, the water pumped out of the mines or from the abandoned quarries, is supplied to their employees for bathing and washing purposes and the Topchanchi water is only used for drinking purpose. The headquarters of both Jharia Mines Board of Health and Jharia Water Board are at Dhanbad. The Water Board has got its offices at Topchanchi, Tetulmari, Kusunda and Jharia. Till 1954, Dhanbad town did not have pipe water –supply for the public in general. But some of departments such as Eastern Railway, Indian School of Mines and Applied Applied Geology,Dhanbad Civil Hospital, Jharia Mines and Water Boards, Department of Mines, had and have got their own arrangement for pipe water. Most of the dwelling houses have got their own wells. The supply of pipe water for the municipal area of Dhanbad town has been in existence since 1960. There are two water towers which have been constructed in 1960 by Public Health Engineering Department. Their capacity is 1 lakh gallon of water. The details will be found in the text on Local Self- Government.

MEDICAL AND PUBLIUC HEALTH SERVICES.

Jagjiwanagar, the newly –built town has got its own water-supply and the arrangement is quite satisfactory.

MALARIA AND ANTI-MALARIAL MEASURES.

The endemic home of malaria into the district is at the foothills and swamps and ditches where water accumulates. The district was an abode of malaria till 1949-50 and Topchanchi was the main centre.

The Government of India with the co-operation of World Health Organisation and other local and international organizations had started National Malaria Control Programme in Dhanbad in 1950. the Anti-Malaria Department of Dhanbad is the one of thecircles of Santhal Parganas district with it's headquarters at Jamtara. The circle headquarters of Anti-Malaria Department is at Dhanbad. The Anti- Malaria Officer is the administrative head of the circle. There are sub-units at Jharia, Topchanchi and Chas in this district. The sub-units are looked after by a supervisor.

The following statistics given below will show the malaria cases of the district:-

Year.	No. of malaria cases treated
1956	**7,689**
1957	**5,788**
1958	**4,525**
1959	**2,375**
1960	**1,345**
1961	**765**

From the above statistics it can be observed that the malaria cases came down to 765 during 1961 which was 7,689 in 1956. it may be said that malaria has been some what controlled. There is no doubt that many cases never come to the hospitals.

CONCLUSION.

The survey of public health and medical facilities would show that a good deal of progress has been achieved so far as the facilities for the colliery labourers are concerned. The recent programme of the Government in starting a number of Blocks to cover the district and to give a doctor with some staff to each of the Block is calculated to streamline the public health and medical facilities provided the doctor works with missionary zeal and is unmindful of his private practice. It is unfortunate that while the colliery hospitals and dispensaries whether started by the Centre or by the collieries should be well equipped and well staffed, the Government hospitals and dispensaries should continue to be rather ill- equipped and ill- staffed comparison.

DHANBAD.

There are no private hospitals and Nursing Homes. There are no medical and public health research centres or institutions. The coal dust and smoke that fill the sky over the collieries form a problem for the proper maintenance of health. The poor diet with insufficient caloric value that is normally taken by the common man cannot be conducive to proper health. Drunkenness is common. The incidence of leprosy and venereal diseases is quite high.

There appears to be a concentration of medical practitioners in the urban areas and a dearth in the rural areas. The number of qualified medical practitioners could not be obtained. There is no statutory obligation for a doctor to register his name locally and very few of the doctors are members of the branch of the Indian Medical Association. Not a single doctor has been reported to be doing any research. No team has been working on any medical problem in an integrated manner although this industrialized district has its indigenous medical problems like smog, industrial diseases, proper diet for the heavy workers, etc. the influence of the typical industrial work upon the mental health of the individual and the community has not yet been attempted to be studied in Dhanbad district which is the Ruhr of India. Dhanbad already has and will have in an increasing way what is described as industrial civilisation and medical public health services here must be attuned to that aspect and if of the same pattern as any where else will not be enough or wholesome.