

CHAPTER IV PUBLIC HEALTH

CLIMATE

In the western portion of the district the climate is dry and, on the whole, healthy. The greater portion of the country is high and undulating, the soil is porous and well-drained, and the people suffer comparatively little from malarial affections. Towards the east of the Bishnupur subdivision the land is lowlying and badly drained, and the climate is unhealthy and malarious. This tract adjoins the malarious parts of the Burdwān and Hooghly districts; and it is noticeable that when the Burdwān fever was introduced from the adjoining thanas of Galsi and Khandghosh in Burdwān, it caused a heavy mortality here, while its westward progress was checked on reaching the high ground in the west of the subdivision. The thanas of Indās and Kotalpur are particularly unhealthy, extensive areas being water-logged, while the country is studded with large tanks containing unwholesome water, from which the people obtain their drinking supply.

VITAL STATISTICS

Previous to 1892, there were several changes in the system of registering births and deaths. In 1869 the duty of reporting deaths was imposed on the village *chaukīdārs*, and in 1876 the system was extended to births; but the returns received were so incomplete that they were soon discontinued, and, except in towns, deaths alone were registered until 1892, when the collection of statistics of births as well as of deaths was ordered, and the system now in vogue was introduced. Under this system vital occurrences are reported by the *chaukīdārs* to the police, and the latter submit monthly returns to the Civil Surgeon, by whom statistics for the whole district are prepared. The statistics thus obtained are sufficiently accurate for the purpose of calculating the approximate growth of the population and of showing the relative healthiness or unhealthiness of different

years; but little reliance can be placed on the classification of diseases to which deaths are attributed, owing to want of medical knowledge on the part of the reporting agency, which causes the *chaukīdār* to regard fever as a general cause of death.

The statistics shew that the population is steadily growing, largely because the Burdwān fever epidemic has died out. Throughout the nine years ending in 1901 the recorded birth-rate exceeded the death-rate, in spite of the fact that between 1894 and 1897 the mortality was comparatively high owing to the unusual prevalence of cholera, and that the district was visited by famine in 1897. The evidence of a growing population supplied by these returns is confirmed by the census statistics, which show that the population increased by 4 per cent since the census of 1891. The returns for the subsequent seven years 1901-07 make it clear that this progress has been maintained, the number of recorded births exceeding the number of deaths by 42,000. The increase is greatest among aboriginal races, such as Sāntāls and Bāuris, and no one who has seen a Sāntāl village and witnessed the swarms of healthy young children would be surprised at this. Sāntāls and Bāuris, moreover, are said not to suffer from fever and other diseases as much as the better castes of Hindus, probably owing to the healthier lives they live, to their residence in the west of the district, and to their stronger diet, which often consists of fowls and goats, and among Bāuris of pigs.

The highest birth-rate returned since the present system of reporting births and deaths was introduced was 41.18 per mille in 1899, and the lowest was 24.19 per mille in 1892; but there is doubt about the accuracy of the latter figure, for the system now in vogue was only introduced in that year, and since then the birth-rate has never been less than 32.56 per mille. The highest death-rate hitherto returned is 34.33 in 1907, and the lowest is 18.79 per mille in 1898.

PRINCIPAL DISEASES

FEVER

According to the returns submitted year after year the mortality from fever is far less than in other parts of Bengal, the death-rate never having been higher than 23.58 per mille (in 1907), while

it has been known to fall as low as 12.78 per mille (in 1898). After allowing for the fact that the *chaukidār*, who reports the deaths, is apt to include a number of other diseases, in which the temperature rises to any height, under this head, it is clear that Bānkurā is far less subject to fever than the waterlogged tracts further to the east. The following account of the types of fever found in the district has been contributed by the Civil Surgeon, Dr. V. L. Watts.

MALARIAL FEVERS

The types of fever prevalent in the Bānkurā district may be divided into two groups—the malarial and the non-malarial. Malarial fevers are found chiefly in the eastern thanas of Indās and Kotalpur, which adjoin the district of Burdwān. In these tracts the soil is alluvial, the country is flat and badly drained, and there are numerous filthy tanks, some of which were originally excavated from motives of piety, but have been neglected owing to the difficulties incidental to divided ownership, while others are used for the purpose of irrigation in seasons of drought. Anopheles mosquitoes, which transmit malaria, breed in the stagnant water of many of these tanks and also in the rice-fields, which are likewise responsible for the propagation of malaria. In the western portion of the district malarial fevers are comparatively rare, owing to the undulating character of the land and the pervious nature of the soil, which lend themselves to efficient drainage; but, of late years, large tracts have been brought under cultivation by a process of levelling and manuring, which favours the stagnation of water, and here malaria has made its appearance. The malarial fevers observed in the district are of two varieties—the intermittent and the remittent. In the former, the fever alternates with periods of remission, and the typical cold and sweating stages are well marked; while in the latter the temperature never comes down to normal, but the fever shows two distinct exacerbations and remissions during the day. Both these varieties of malarial fever are amenable to treatment by quinine; and if attended to early, organic complications seldom occur.

NON-MALARIAL FEVERS

The non-malarial fevers are principally seen in the western portion of the district, where the porous laterite soil and the

undulating nature of the country are unfavourable to waterlogging. The following are the types commonly met with. Heat fever (locally called *ārhaiyā* fever, as it lasts two and a half days) occurs in the hot months of the year and is characterized by a sudden accession of pyrexia, the temperature often rising as high as 105°F. and coming down to normal after two days or so without any treatment. The dry heat resulting from the radiation of the rocky laterite soil and the use of water impregnated with peroxide of iron which permeates it, cause constipation and congestion of the liver, and give rise to a remittent type of fever, which, unlike malarial fevers, does not respond to quinine, but yields, usually in the course of a fortnight, to cholagogue remedies, particularly calomel. Enteric fever is common in the municipal towns of Bānkurā, Bishnupur and Sonāmukhī. It occurs chiefly in the neighbourhood of filthy drains, and is also seen in persons living near tanks containing decomposing vegetable matter. This fever usually lasts from three to six weeks, and about half the cases prove fatal. It is often complicated with malaria. Many cases of so-called fever and dysentery, or remittent fever, are really cases of enteric. Derangements of the stomach and bowels caused by worms or food disorders in children give rise to some kinds of low fever. Meningitis occurs as an independent affection in children, and in adults complication of fever. Cases of cerebro-spinal fever are not uncommon in persons who live in a vitiated atmosphere, and have been particularly noticed in dwelling-houses adjoining cattle-sheds and dung-hills. The disease is almost invariably fatal.

At the change of seasons, particularly from the rainy to the cold weather, catarrh, bronchitis, etc., often give rise to continued fevers, which resemble influenza. These seasonal fevers are chiefly due to great variations in the temperature common at such periods of the year, especially the sudden fall in the temperature after sunset, against which the scanty clothing of the people is a poor protection. Filariasis manifested by swollen extremities is associated with a form of fever which chiefly comes on at night. This disease is caused by the bite of the culex mosquito, which abounds in tanks, drains, etc. Elephantiasis is more common in the western than in the eastern part of the district, and is often mistaken for ague. The congestion of the nasal mucous membrane, which is

exceedingly common here, sometimes gives rise to a fever called *nāshā* fever, the symptoms of which are heaviness in the head and uneasiness along the muscles of the nape of the neck. This condition is speedily relieved by puncturing the mucous membrane of the nose, aided by a brisk saline purge. Among the miscellaneous class of fevers may be mentioned the septic fever of childbed, caused by the dirty practices of the *dhāis* or native midwives and the insanitary surroundings of the lying-in room, and pleurisy, peritonitis, erysipelas, tuberculosis, etc., in all of which fever is a symptom. Many cases of so-called ague have been really cases of phthisis.

CHOLERA

Cholera is almost always present in a sporadic form, and sometimes becomes epidemic, the worst epidemic on record being that which occurred in 1897, when 3.30 per mille of the population died of this disease. The main source of cholera is the bad supply of drinking water in some places. The common practice is for the people to obtain their drinking water from tanks which are unprotected and are frequently polluted, open air defecation along the banks being a common practice.

SMALL-POX

Small-pox is also occasionally epidemic, especially in thanas Bishnupur and Sonāmukhī, where it broke out in a virulent form in 1901. As a rule, however, there are no serious epidemics, for except in that year and in 1902 the death-rate due to this cause has never been as high as 0.50 per mille since the present system of mortuary returns was introduced.

LEPROSY

Leprosy is exceedingly common in Bānkurā, the census of 1901 showing that no less than 3.67 per mille among males and 1.68 per mille among females are lepers. Bānkurā, in fact, enjoys the unenviable reputation of harbouring a greater number of lepers in proportion to its population than any other tract in the whole of India. The causes of its excessive prevalence in this district are not known. Popular belief has it that leprosy is contagious and hereditary, and that the excessive use of

unwholesome meat is the principal cause of the disease; the large number of lepers among meat-eaters is quoted in support of this belief. It seems at least certain that the disease is most prevalent among the labouring classes, and especially among Muhammadans, Bāuris, and other aboriginal tribes, who are meat-eaters. The theory that it is due to the use of badly cured fish does not find corroboration in this district, for very little fish is imported and it enters but slightly into the diet of the people. Mr. B. De, formerly District Magistrate of Bānkurā, conjectured that the people of this part of the country must be specially liable to the disease, and pointed out that in Khulnā he found leprosy more common among the Bunās, who had gone there from Bānkurā and the adjoining districts, than among the indigenous inhabitants. No connection, moreover, can be traced with cholera, for although leprosy is worse in Bānkurā than in any other district in West Bengal, it has the smallest cholera mortality.

OTHER DISEASES

Skin diseases are more numerous than in other parts of Bengal. Syphilis, dysentery and diarrhoea are also common. Blindness is more prevalent than in most Bengal districts, no less than 121 per 100,000 males and 134 per 100,000 females being returned as blind at the census of 1901, as compared with the Provincial averages of 95 and 85 respectively.

VACCINATION

Vaccination is compulsory only within the municipal areas of Bānkurā, Bishnupur and Sonāmukhī, but is not unpopular even in the tracts where it is optional. Inoculation, which was formerly common, has now disappeared; and the people in general are gradually appreciating the advantages of vaccination, as the protection it affords has practically eradicated epidemics of small-pox in some of the towns and larger villages. The number of successful vaccinations in 1906-07 was 43,769, representing 41.16 per mille of the population, as compared with the Provincial average of 35.56 per mille; while the average annual number of persons successfully vaccinated during the previous 5 years was 36.44 per mille of the population.

MEDICAL INSTITUTIONS

There are 9 dispensaries in the district, including a female dispensary at Bānkurā known as the Lady Dufferin Zanāna Hospital. Of these, only three, viz, the Zanāna Hospital and the dispensaries at Bānkurā and Bishnupur, have accommodation for indoor patients. In the Bānkurā dispensary 28 beds are available for in-patients, viz, 20 males and 8 females; in the Bishnupur dispensary there are 8 beds for in-patients (6 males and 2 females); while the indoor ward of the Lady Dufferin Hospital has 2 beds. The other dispensaries are situated at Ajodhyā, Khātrā, Kotalpur, Māliārā, Raipur and Sonāmukhī. There was also a dispensary at Rol, established in 1901, but it was closed in the year 1904.

These institutions are gradually gaining popularity, especially in the malarious tracts adjoining Kotalpur, the people generally being willing to avail themselves of the benefit of the European system of medical treatment, provided it is given free of cost. They are extremely apathetic, however, in subscribing to the upkeep of the dispensaries, for well-to-do people, who can afford the cost of treatment by a private practitioner, seldom resort to a charitable dispensary for medical aid themselves and will not subscribe for the benefit of others.

LEPER ASYLUM

There is a leper asylum in the town of Bānkurā, of which the following account has been furnished by the Rev. J. Mitchell, Principal of the Bānkurā Wesleyan College, who is at present in charge of this institution. Statistics shew that leprosy is more prevalent in Bānkurā and the neighbouring district of Mānbhūm than anywhere else in India. This fact was brought home to the Wesleyan missionaries by the number of lepers that were continually wandering about, begging in the bazar and in the villages. In the year 1901, the Rev. J. W. Ambery Smith, who was then stationed in Bānkurā, opened up negotiations with the Mission to Lepers in India and the East; and the result was that, on an appeal being made, Mrs. Bryan, a lady resident in Brighton, offered to build the whole asylum, including a church for Divine worship. This generous offer was accepted. The work was commenced in 1901, and after six months there

were several buildings ready for the lepers. For several weeks, no leper came to the asylum, as there was a strong prejudice in the minds of the people against an institution established by the missionaries; but when the ice was broken, the lepers came readily, and at present (1907) there are 56 male lepers, 43 women and 7 children in the leper asylum proper. Two years later the Edith Home was built by Mr. Jackson, one of the officials of the Leper Mission, as a memorial to his child. This Home is being used as an asylum for the untainted children of lepers. There are two departments, one for boys and the other for girls, and at present there are 10 boys and 5 girls in residence. The children are taught to read and write, and the boys are being taught useful trades. In the leper asylum the sexes are segregated, the women's compound being surrounded by a wall.

The site of the asylum is an excellent one, high, dry and healthy, and is situated about 2 miles from the town. Indeed, the asylum, especially the church with its red tiled roof, is a landmark for miles round. In the centre of the compound is a fine well with a never-failing supply of pure water. All the buildings are kept beautifully clean; the lepers are encouraged to make gardens for themselves, and those who can work assist in keeping the compound clean and tidy. Up to the present, the entire cost of maintenance has been borne by the Mission to Lepers. The lepers are well fed and happy; and it is a rare occurrence for any of them to run away. They come to the asylum simply because they wish to come, and they stay there for the same reason. Most of the lepers belong to low caste families, but there are several of high caste, and two are Brāhmans.