

Unseen Enemy

Unseen Enemy:
The English, Disease, and Medicine
in Colonial Bengal, 1617 – 1847

By

Sudip Bhattacharya

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P U B L I S H I N G

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This book first published 2014

Cambridge Scholars Publishing

12 Back Chapman Street, Newcastle upon Tyne, NE6 2XX, UK

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

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ISBN (10): 1-4438-6135-9, ISBN (13): 978-1-4438-6135-9

AND THIS ONE TOO IS FOR

SARANYA

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ACKNOWLEDGEMENTS

I thank Cambridge Scholars Publishing for bringing out this book. Thanks are also due to Mr Ranajoy Bose, Executive Member, Christian Burial Board, Kolkata, for allowing me access to the cemeteries under his supervision. This is the second book to emerge from my wanderings in these cemeteries through the last 5 years. Mr Bose takes great interest in my work. We have spent many hours walking along the boulevards of South Park Street cemetery, discussing its various aspects. Bose has unfortunately received little recognition for his assiduousness in preserving this heritage landmark.

Swami Shastrajnananda, Principal, Ramakrishna Mission Vidyamandira, Belur Math, has always been interested in my work. Dr Swarup Ray, Associate Professor and Head, Department of English, and my other departmental colleagues, have taken in good spirit my obsession with death, medicine, and cemeteries. I would like to thank them all for their indulgence and encouragement.

Then there is my family, my father, Major General (Retired) Sujit R Bhattacharya, MD; my mother, Snigdha; my wife, Anindita; and my daughter, Saranya, who have similarly and patiently borne my frequently irritating passion for death and disease.

I must also thank Dr Basujit Gangopadhyay, Consultant Cardiologist, who read several chapters of this book, and provided medical insights.

PREFACE

This is not the story of Tropical medicine. That has been related by others elsewhere. It is also not an attempt to understand and analyse medical practices in the light of our present day knowledge. In this book, we follow the tale of the arrival and settlement of the English in Bengal, in terms of the diseases they suffered here, and how they treated them. In the early phase of the colony, English doctors were willing to observe local medical practices, and learn from them. As time passed, in medicine, as in everything else, attitudes hardened. After 1857, the British medical establishment in India did not consider it important to learn anything from the land to which they considered themselves and their people exiled. While it might have made sense for me to cover the entire span of the British medical experience in India, the sheer volume of writing that this would require kept me from it. It made more sense to focus on the early colonial medical experience, which included several interesting aspects, like the local practice of inoculation for smallpox, as reported by Holwell, and Esdaile's mesmeric surgery, which effectively bracket the period under consideration. Similarly, Balfour's indigenous sol-lunar theory was for long popular and contentious. Other outstanding figures in this history include that of Twining, who migrated from Nova Scotia to England, became a surgeon, joined the army, served in the Peninsular War, and at Waterloo, and then settled to practice in Calcutta, where he died in an accident. Frederick Harrington Brett, an accomplished army surgeon specialised in ophthalmic procedures and author, left service after 18 years in Bengal, and after long travels, probably died in great obscurity far from home. In the same way, John Peter Wade, a brilliant doctor, has lived on in popular memory not because of his exceptional professional aptitude but due to his pioneering history of Assam, where he served several years. The English gained much political influence due to their doctors' proficiency, as proved by Boughton, and Hamilton. Doctors suffered much during political tussles with local rulers, as exemplified by the horrific experiences of the 3 surgeons at Patna.

My aim, as always, has only been to retell the stories noted and mainly published by these medical men, which relate to their experiences in Bengal. Their times were vastly different from ours, and all attempts at interpretation in terms of our world will fail to do them justice. They worked with the medicines and surgical techniques known and available to

them, in terms of such scientific knowledge as they had learnt. To their credit, they added to this corpus of knowledge by observing the 'new' diseases they came across in Bengal, and how indigenous medical and home practices were used to treat these conditions. Back home in England, however, their professional colleagues were not greatly enthused by their writings or their findings. James Johnson was, in this regard, unusual, for he spent 3 years in and around Bengal. In any case, he had already gained some reputation in England, and his tome was more acceptable than those written by doctors like Balfour. Balfour's was a sad case, even though Johnson corroborated his theory from personal experience. Eminent English medical men like James Lind, who had never lived in India, found it easy to dismiss Balfour's sol-lunar theory. Other theories impacted medical practice in Bengal, like the Brunonian theory. Based on the complex but rather idiosyncratic concepts of Dr John Brown, one is amazed to find doctors in eighteenth-century Calcutta applying it, with the intention of correcting its inherent errors.

Death was the constant companion of the European in early colonial India. Death came suddenly, and at times, claimed entire families, sometimes in sad order, with the father following the mother and the children into the grave within weeks. Often the demise of the head of a family, in a male-dominated society, meant catastrophe for the bereaved. Many children were orphaned suddenly, and sent back home to relatives they had never seen, in the company of people they hardly knew. Still more tragically, many children died, their ailments not always clear to physicians and surgeons, who simply reduced for them the doses of the same medicines that they used for adults. Since the voyage itself was long and hard, adults and children died on the way out, as they did on the way in. Shipwrecks often occurred, and sometimes ships simply disappeared, and were presumed wrecked with loss of all on board. In such a scenario, Europeans joining service with the East India Company wanted to know about their chances of survival in India. This led to considerably detailed statistical analyses, which seemed to prove that death did not visit as frequently as popularly supposed. However, when one reads that the South Park Street cemetery was opened for burials in 1767 and closed in 1790, one wonders if the statistical findings were correct. This view is strengthened by the fact that at the end of what is Park Street today (and known then as Burial Ground Road), there existed a huge cemetery complex, in addition to other cemeteries in Calcutta, like the French burial ground. Considering that all these cemeteries were full by the middle of the nineteenth century, when another enormous cemetery, the Lower Circular Road burial ground, was established, one is quite certain that life

in Bengal took high toll of Europeans who lived here. Of course, they came here to shake the pagoda tree, but this has nothing to do with their early deaths, or those of their wives and children.

Strolling through the short boulevards of South Park Street cemetery, and reading the sorrowful inscriptions on the tombs, one understands the humane reason for doctors like Balfour to seek out theories that seem amazingly unscientific today. One also understands why Esdaile had to be given the chance to run a Mesmeric Hospital, without his request to do so being dismissed peremptorily. If a hypothesis that claimed to treat disease better if the phases of the moon were observed or a technique like hypnosis could be used to treat disease as painlessly as possible and lower mortality, they were welcome. However, there were doctors who swore by venesection, like James Johnson and William Twining, and surgeons like Brett, whose surgical techniques, imbibed from his teacher, Robert Liston, famous for entering the operation theatre, crying out 'Time me, gentlemen!' horrify one. At the end of it all, it only remains for us to read about these early doctors in Bengal, and form our own thoughts.

INTRODUCTION

DEATH AND DISEASE AMONG EUROPEANS IN COLONIAL BENGAL

Death was not the great leveller among Europeans in colonial Bengal. The wealthy could afford architecturally-designed tombs three stories high, while the humble were interred in ordinary tombs. As a visit to the South Park Street cemetery in Kolkata will show, the intricately-decorated mausoleums of the rich have survived the ravage of time, while humbler graves have mainly disappeared. Wandering among the tombs, one sees the dates of the dead, and realises that they mainly died young: quite certainly so by today's standards. Only a handful of graves hold the remains of elderly persons.

In colonial Bengal, death came suddenly and insidiously to the European. Irrespective of rank and status in society, disease struck without warning, and killed European men, women, and children, even as doctors strove to employ a limited pharmacopoeia to save lives. In colonial Bengal, therefore, disease, and not death, was the great leveller. Sir William Jones was a Justice of the Supreme Court of Judicature, and a renowned scholar of language and culture. He sent his wife home early in 1794, as she had been weakened by local ailments, and needed a change. Within a month of her departure, Sir William discovered that he had developed a tumour 'as big as his fist' in the right side of his abdomen, which he did not bother about, thinking that it would go as innocuously as it had come. Instead, Sir William had exercised himself more than before, frequently walking before his carriage all the way from the courts to his home at Garden Reach, a distance of more than 4 miles. He remained in considerable pain due to the tumour but did not consult any physician, preferring to follow the classical ideal of not allowing the mind to succumb to bodily ache. Around 17 April 1794, Sir William began suffering a bilious fever, possibly accompanied by delirium. Dr David Hare attended Sir William, and discovered the tumour. The usual limited curatives were employed, and by the night of Saturday, 26 April, it was held that Sir William was responding to treatment and would soon be well

enough to consider returning to Europe aboard a ship sailing from Botany Bay. The following morning, Sir William's *khansamah* ran into Sir John Shore's presence and proclaimed that his master had gone mad. Sir John, accompanied by General Sir Robert Abercrombie, went to Sir William's house, only to be greeted with news from other servants that soon after the *khansamah* had left, Sir William had asked for some tea, and having had it, died. Sir John and General Sir Robert confirmed this, finding Sir William on his couch, quite dead.

William Hickey, the social gadfly and memoirist of Calcutta, had met Charlotte Barry in England in 1781, and was smitten. She became his mistress soon, and around the end of the year, so Hickey wrote in his *Memoirs*, he offered her marriage, which she refused. Since she was only 21 when she died 2 years later, she must have been 19 at the time she became 'Mrs Hickey'. Recalling the moment when Charlotte declined to marry him on the grounds that should he at some time in future regret his marriage it would break her heart, Hickey wrote over 40 years later that from then on, he considered himself her husband as much as 'the strictest forms and ceremonies of the Church' could have made him. His dissipated lifestyle having impoverished them, William and Charlotte decided to sail to India. Failing to get a ship from England, they sailed to Lisbon early in 1782, whence they availed of a ship to India in June. In between, Charlotte had been seriously ill, and was sent back to Falmouth under medical advice. Hickey often wrote of her general weakness but Charlotte refused to be separated from William, and she returned to Lisbon. The couple reached India at a bad time, when the British and the French were at war. After their ship had been captured by the French, the Hickeys were well-treated by Admiral Suffren at Trincomalee, and they reached Madras in March 1783. Following a brief but interesting sojourn there, during which they met an old family friend, the 'famous' Paul Benfield, the Hickeys sailed aboard a Royal Navy ship to Bengal, landing at Budge-Budge towards the end of June 1783. Of the sinister manner in which disease, unknown and unpredictable, struck, is exemplified by the manner in which Emily, the mistress of Hickey's friend, Robert Potts, was carried off. Robert and Emily had sailed from Madras for Calcutta in May 1782. Given the time of year, when the weather is hot and humid, Emily soon began suffering from 'the prickly heat', 'a sort of rash or eruption upon the skin, very prevalent in hot countries, especially in Asia'. The rash makes the skin extremely sensitive, and the sufferer finds it difficult to endure lying down. Hickey wrote that the prickly heat was common among newcomers, and was caused by 'the superior richness or nicer susceptibility of the blood and general system'. While drinking cold fluids

eased the discomfort, this also greatly increased the rash. Hickey's opinion, which was the general medical opinion of the time, classified the prickly heat as 'a sign of vigorous health'. Sufferers did not die of it, and tolerating the discomfort brought future immunity. Emily, however, drank tumblers of cold milk diluted with water. She downed 2 such glassfuls when their ship came in sight of Kulpi, and at once complained of feeling very sick and faint. Within moments, she was comatose, and soon died. Her prickly heat was seen to have disappeared entirely.

Hickey's arrival at Calcutta on 30 June 1783 was not a happy one. His name as attorney had been struck off the rolls at the Supreme Court. Despite the fact that he had occasionally made some money at Madras by providing legal advice to acquaintances, Hickey was in great financial trouble, having incurred vast debts in England, Lisbon, and Madras, at interests varying between 10 and 12 per cent. Illness changed people, and Hickey was amazed to find among his former friends in Calcutta, Ulysses Brown, of the Horse Guards, who had just passed through a long and dangerous ailment, 'which had so altered and reduced him that except from the voice I should not have recognised him'. Nonetheless, with Potts' help, and Sir Elijah Impey's friendship, Hickey's name was soon enrolled once more as an attorney. Moreover, June was probably the wrong time to arrive in Calcutta, given that this was the beginning of the monsoon. Renewing past friendships, Hickey found that many of those he had known in Calcutta during his previous visit were dead of bilious fevers and similar mysterious ailments. Having spent three months at his friend Potts' garden-house, often travelling to the city on work since many of his former clients had returned to him, Hickey moved to a conveniently situated rented house in Calcutta on 1 September 1783. However, Charlotte was ill. At Potts' Gardens she had often complained of 'sudden and violent pains in her breast', which were medically dismissed as being 'nervous' attacks, curable through 'change of weather'. In Calcutta, Charlotte fell ill more frequently. Recollecting decades later, William said that 'The seeds of a fatal disease were nevertheless then lurking about her, the progress of which was hastened by the uninterrupted course of entertainments she was engaged in'. European social life in early colonial Calcutta was hectic, and they kept late hours, drank much wine, and ate heavy meals, which took their toll on their minds and bodies, given the climate. In November, the weather became pleasant, and balls became common. Charlotte attended these, and was in great demand, for she loved to dance. By the end of November, William noticed in her 'daily increased weakness and languor'. He called in Dr James Stark, the 'favourite practitioner of Calcutta'. Dr Stark advised rest and quiet for a while. This

did not have the necessary effect. On Charlotte's health further declining, Hickey called in Drs James Wilson and Stark. They now advised a 'change of air' through a river cruise. William took Charlotte on 7 December 1783 to Budge-Budge, where Major Mestayer, a friend, lived. Briefly revived, Charlotte soon relapsed and begged William to take her back to Calcutta. The doctors remained convinced that there was nothing seriously wrong with Charlotte. But William saw her sinking daily, and even his appointment as Under-Sheriff of Calcutta failed to draw him from Charlotte's side. On 19 December Dr Stark declared Charlotte to be mortally ill. He warned William to be ready for her death, which was fast approaching. She was stricken with a 'painful disease', William wrote, which she bore uncomplainingly, probably because she had been prescribed heavy doses of laudanum. He had his public duties, and although his fellow Englishmen were sympathetic and helpful, he daily rushed home, expecting the worst. She lingered until Christmas Day, 1783. That morning she slept uneasily for 3 hours under the influence of probably still heavier doses of laudanum. Awaking, she spoke to William, and fainted. The doctors made a dramatic appearance at that moment, and proclaimed that she was gone. William was taken away from the house, and the doctors kept watch over Charlotte, who was comatose. She died at 10 pm 'with a gentle sigh'. She was buried the following day, and William, devastated, accepted an invitation from Potts to go and stay with him at Burdwan, where the latter was in charge of the district. William stayed there until 10 January 1784, when he returned to Calcutta and, in his loneliness, commenced a fast life, going to bed drunk every night, and caring nothing for his mounting debts even as he earned great sums from his practice.

Mrs Charles Lushington, when leaving Calcutta in 1827 for England by the overland route, noted that her life in Bengal had been driven by 'a resignation similar to that of the sufferers in Dante's Purgatory'. 'To return to England was the incessant yearning of my heart', she wrote, this attitude having been formed by her experience of 'frequent illness, from witnessing the generally dreadful devastation of the climate, or from loss of friends'. The English cemeteries in India were 'particularly melancholy', she said, since a visit to any one of them would reveal that these 'well-tenanted burying grounds of the cities' contained little more than 'the graves of the youthful, who have been cut off by some violent disease amid the buoyancy of health, or the tombs of those of middle age arrested by death when just about to reap the fruit of long toil and privation in a return to their native land'. Consequently, among Europeans in India there were 'scarcely any old persons' as nearly everybody was 'a temporary

resident'. The European widow's fate was worse in India because in England she had at least a protective family circle for herself and the children. When disease carried off the head of the family, its sole earning member, the European widow in India was dispossessed of her home within weeks, the family movables either packed or auctioned off to meet debts, and she hurried aboard a ship to England with the children, 'almost ignorant of the spot where her husband's remains are deposited'. Little remained to help her remind her children of their father, other than the information that he lay buried in a distant land, and his tomb was inaccessible to them.

The Company, however, took care to see that the family of a deceased employee was not deprived of its rightful dues. The wills of their dead servants were placed for the consideration of the council, who examined their legal veracity, questioned the witnesses, and had the testaments meticulously noted in their consultations diary, a copy of which was sent to England at the end of each calendar year. The case of Paul Graton is a random but relevant example. Graton was presumably a sailor of French descent in the Company's service, since, following his death, 'the French Director' at Hooghly sent his effects to the council at Calcutta in March 1714. The French had sent Graton's effects to the English because Graton's widow had married an Englishman, John Castle. Paul Graton also left behind an infant son, Gabriel. The Calcutta council, despite being absorbed then with their hectic preparation for the Surman embassy to Delhi, examined Graton's effects, and gave John Castle 'Particulars amounting to 92 rupees 12 annas ... to be reckoned to him as part of his Wife's share of her late Husband Paul Graton's Estate' on 12 March 1714. On 9 April, they provided a full account of Paul Graton's estate, 'and division of it between his Widow and Infant Son'. The gross amount was 5353 rupees. From this, the cost of 'his Wife's diet and Lodging in Hooghly whilst he was at sea', 103 rupees, was deducted, and the amount to be divided assessed at 5250 rupees. Of this, Graton's widow, 'now the wife of John Castle', was given 1750 rupees, 'her dividend being one third' of her late husband's estate. John Castle was given a written acknowledgement that the remainder, 3500 rupees, 'remains in the Honourable Company's Cash at Interest for the use and Account of Gabriel Graton the infant son of Paul Graton'. On 11 April 1715, the council paid to John Castle 520 rupees as interest when John Castle demanded it 'to defray the charge of maintaining the Child'. The final entry in this matter may be found in a council decision dated 3 December 1716, when John Castle demanded an advance of 500 rupees to send

Gabriel Graton to England to be educated. The council agreed to this payment, and the child was to voyage aboard the *Prince Frederick*.

The problem with leaving India was that England offered few similar advantages of life, particularly the easy extravagance, power, and chance to make a fortune. Decisions to leave India therefore brought 'sobered anticipations of the future' to Mrs Lushington, such that she did not wonder at those who decided to remain 'one year more'. However, she also noted that this determination proved fatal to many. An example of this fatal determination is Major General the Hon Sir William Casement, KCB, of the Bengal Army, and also Member of the Supreme Council of India, who, after 47 and a half years' distinguished service, 'was swayed by a sense of duty to accede to the pressing instance of the Governor General in Council to deter his departure from India, a step which exposed him to the fatal malady which terminated his valuable life' (Inscription on his tomb, at the Lower Circular Road Cemetery, Calcutta). General Casement died on 16 April 1844, aged 61.

Since few could choose to leave India before they had completed their tenures, it became essential to study local disease alongside traditional treatment. Disease came suddenly to the European in India, disparaged the rudimentary medical resistance offered, and took quick toll of life, leaving in its wake graves with piteous inscriptions of lamentation. Disease did not discriminate, but took young and old, men and women, irrespective of status. Even doctors were prey to ailments. James Kerr, Surgeon in the service of the East India Company upon the Bengal Establishment, 'distinguished as well by his Medical knowledge as by his improving the arts and enriching science by his discoveries in India' died in Calcutta on 17 September 1782, aged 44. Dr Rowland Jackson, MRCP (London) died aged 63 on 29 March 1784. Some of the other medical men interred in the South Park Street cemetery include James Arthur, Surgeon, who died on 22 May 1786, aged 49, Edmund Bengough, MD, who died aged 55 on 10 January 1787, and John Campbell, MD, 'Assistant Surgeon in the service of the Honourable East India Company, who was carried off by a fever, at the General Hospital, Presidency', on 19 November 1803, aged 24.

The Honourable East India Company offered its employees statistics on life-expectancy so that they would know the odds for and against their survival in India. *A General Register of the Hon'ble East India Company's Civil Servants of the Bengal Establishment from 1790 to 1842* (1844), compiled by Ramchunder Doss, under the direction of H T Prinsep, gives us the necessary figures. Adjusting variables to suit conditions of appointment, travel, arrival, and joining service in Bengal, the *Register* informs us that between 1790 and 1836, 90 out of 4525 civilians died

between the ages of 20 and 25 or, up to 5 years' service. This is only 1.98% of the total number of civil servants employed by the Company. Between 5 and 10 years' service, the number of civilians is placed at 3454.5 (after adjustments), and the number of deaths is 72. The risk rises marginally during this period to 2%. Between 10 and 15 years' service, the numbers are 2469.5 civilians against 41 deaths, which drop the risk factor to 1.66%. As a number of retirements took place between 15 and 20 years' service, in this period there were 1879 civilians on the rolls, and 44 deaths, raising the risk to 2.34%. Many more retirements and resignations from service taking place between 20 and 25 years' service, the number of civilians included in this group was 1214.5, with 43 deaths, pushing up the risk to 3.54%. Against this higher risk, there were 33 retirements during this period, showing that the increase was inflated. Fewer civilians stayed to serve up to 30 years, 660.5 against 24 deaths and 31 retirements, which pushed up the risk still higher to 3.63%. At the end of 35 years' service, 299 civilians continued in employment, of whom 16 died and 20 retired, pushing up the risk to 5.35%. Few remained in service after 35 years in Bengal, 109 against 3 deaths and 8 retirements, a risk of 2.75%. Only 25 civilians remained on the Company's rolls with 40 to 45 years' service, and of these, 2 died and 2 retired, raising the risk to 8%. In another table, Prinsep demonstrates that during the same period, most deaths took place during the 2nd, 8th, and 9th years of residence in Bengal, peaking briefly again in the 17th falling thereafter, to 2 in the 30th year of service. It was presumed that the newly appointed Writer was aged 20, which leads us to the conclusion that most deaths occurred at the ages of 22, 28, 29, and 37.

Prinsep's calculations were in response to an article published in *Gleanings in Science*, September 1831, titled 'On the Duration of Life in the Bengal Civil Service'. While admitting that the subject of the article in *Gleanings* 'is of first rate interest', Prinsep says that the conclusions of this paper 'are too startling to be admitted without a strict examination of the data, which are the basis of calculation'. The results are indeed startling, for the author shows that between 1790 and 1799, 217 Writers were appointed, of whom 79 left the service, 84 died, and 54 remained. During the period 1790 and 1800, 246 were appointed, 85 left service, 93 died, and 68 remained. The figures are worst for 1790-1802, when 289 were appointed, 91 left service for some reason or other including dismissal, 100 died, and 98 remained. During 1790-1808, the corresponding numbers are 436 appointees, against 75 resignations or dismissals, 109 deaths, and 252 survivals. Further analysis showed that by age 23, the annual decrement of life for the newly appointed Writer rose to 4%. This is in keeping with the two-monsoon rule of thumb that determined the survival

rate of a European in India. The annual decrement of life fell thereafter, peaking again at the ages of 40, 44, 45, 47, and 49, when it hovered around 10%. More adjustments for periodicity and averages show that the ages between 40 and 50 are most dangerous for the Bengal civilian. The author of the article concluded that the article showed the influence of the Indian climate on European constitutions that 'it induces premature old age', even under 'the most favourable circumstances'. 'Arriving in the country at the most advantageous age, subject to little exposure', the Bengal civilians 'with incomes sufficient to command all the comforts of life, and for facilities for renovating impaired health by temporary removal to another climate', it was astounding that the high mortality rate among them was in fact many times better than 'any other class of residents in the country'. Considering that the Company had recently allowed a 3-year absentee allowance to those compelled to retire to England due to illness, furlough allowance for 3 years to those who had spent 10 years in India, and a pension of £1000 to those completing 25 years' service, the author held that in terms of the life tables, these measures would 'probably lessen the mortality, from the ages of 20 to 40; increase it from 40 to 45, by the inducement they will hold out to endanger a broken constitution, for a few more years, in hopes of obtaining the pension; and materially lessen it subsequently to the age of 45'. The figures in all these studies deal only with the lives of men, and do not venture to analyse the survival statistics for women and children.

The editor of *Gleanings* acknowledged the importance of the article as well as the fact that the figures and tables needed thorough analysis, while agreeing that the ages ranging from 40-50 were the most hazardous period for the Bengal civilian. After pointing out the need for certain adjustments to the author's calculations, the editor writes that the paper seemed to conclude that the results were 'far too favourable for the chances of life during the first few years of residence, and perhaps a little too unfavourable towards the close of his series'. This aberration arose, the editor felt, from the contributor's lack of precise information about 'deaths in the service, each to its proper year, reckoned from the arrival of the individual, which seems to be the only way to ascertain the influence of the climate upon his constitution'. The reason why everyone found this study of interest and importance was because sickness nearly always meant death, and death speeded up the possibility of promotion along a slow, time-bound system where seniority (and hence survival) alone mattered. Even if it did not kill outright, sickness often removed a man from the system, forcing him home with his family, on medical certificate.

Sir James Ranald Martin presents in his book, *The Influence of Tropical Climates in Producing the Acute Endemic Diseases of Europeans* (1855, first edition; 1861, second edition), two 20-year lists of deaths, between, compiled from the vestry records of the Protestant burial ground in Calcutta. The first list covered the years between 1796 and 1815, and the second, between 1818 and 1838. These lists are both fascinating and tragic. During these 40 years, 1036 European children aged below 5, and 6750 Europeans aged more than 5, died in Calcutta. The worst months during 1818 and 1838 were May, and the period between August and January. For 1796 – 1815, most deaths took place between August and December, with a significant peak in November. In both lists, February was the healthiest month. A further study of the returns of patients from the Presidency General Hospital in Calcutta showed that during 12 years, 15,293 Europeans were admitted, of whom 1704 died. Martin concluded that this showed a ratio of 1 death to 9 admissions. “From the ‘Medical Board’s Table of Seasons’”, Martin continued, “it appears that the most healthy months comparatively are February, March, April, and May; that from June to January the admissions range high, these also being by far the most fatal months’. Remittent fevers, hepatitis, dysentery, and diarrhoea, he writes, were worst during October to January, while intermittent fevers were most common in September.

Another table, found by Martin in ‘the records of the Committee for the Improvement of Calcutta’, studied mortality in Calcutta during 1817 and 1836, again using burial records. This table shows that 5065 Protestants died during the period concerned, as did 240 Scots (in the Scottish burial ground), and over 8000 Catholics, followed by 24 Greeks, and 315 Armenians. Further analysis showed that the mortality rates for the English worked out to less than 1 in 28 per annum, as compared to 1 in 36 for the locals, since the latter added up to nearly 60,000 persons. The mortality rate for Armenians was almost the same as that for the English, since it stood at 1 in 25 for the former.

The Medical Board to the Committee for the Improvement of Calcutta stated that during 1 January 1808 to 31 December 1837, the number of Europeans admitted to the Presidency General Hospital was 35119, of whom 3607 died, leading Martin to conclude that the mortality rate for admissions for this 30-year period stood at 10.27%. Looking at the mortality of civil servants during 1790 – 1836, he found that per thousand, 48.6% of those aged over 50, and with 30 years of service, died; for those aged 40-50, with 25-30 years’ service, this figure was 36.4%; for those aged 40-45, and 20-25 years’ service, at 35.4%; for those aged 35-40 and 15-20 years’ service, at 23.4%; for those aged 30-35, and 10-15 years’

service, at 16.6%; for those aged 25-30, and 5-10 years' service, at 20.8%, and for those aged 20-25, with 1-5 years' service, at 19.9%. The mortality percentage for civil servants aged 20-35 was nearly the same. However, the figure was lower for the next stage because, as Martin reminds us, civil servants were allowed to go home on 3 years' leave on the completion of 10 years' service. This added to longevity, and detracted from the mortality percentage for that age and service seniority. 'The official results in regard to the mortality at each age among the military officers and civil servants of the Bengal Presidency, afford a convincing proof that in the East Indies', Martin wrote, 'no advantage has hitherto been derived from length of residence'. This statement is supported by a comparative study of mortality among European troops in other tropical locations. In Jamaica, for example, mortality was around 128% for all ages. Similarly, it was high in Ceylon (86.4% for age-group 33-40; 126% for those aged 40-50). The mortality rates were nearly the same for all age-groups in Mauritius, Bombay, and Bengal. Of these, Bombay was statistically the healthiest. Writing in 1855, Sir James Ranald Martin took up the most obvious question, 'do we not live under an improved climate, and is not the mortality of Europeans greatly diminished of late years?' Answering this question, which every European in Bengal wanted to ask, Martin stated that it was not easy to arrive at a conclusion, 'owing to the absence of older statistical record'. However, it had to be admitted that 'the climate of the actual site of Calcutta is improved to a certain extent ... and that European general mortality is likewise diminished, amongst the better classes especially'. A return of the figures relevant to European officers, soldiers, and their families, in the Bengal Presidency shows that between 1 April 1850 and 31 March 1854, mortality among children stood at the horrifying figure of 84.1 per 1000.

The *East India Sketchbook*, by an anonymous writer, was published in 1832-33, in 2 volumes. The second volume contains a short story titled 'The Sick Certificate', whose theme is the politics of sickness in the Company's service. Captain Darnley, the protagonist, has been ill with 'some severe malady'. At the beginning of the story Darnley and his wife sit together, contemplating their future. Darnley fears that he does not improve, and Anne, his wife, thinks the same but will not concede it. Darnley looks at his vest, and tells his wife that not so long ago it fitted him so closely but now was obviously loose on a wasted frame. Anne assures him that this is typical of India: 'You know in this country how soon one is pulled down! And then recovery is always so slow!' Darnley would not be thus put off, and he wanted to be told what the doctor had recommended. "He said, 'India will not do for Darnley, he must go

home’”, his wife told him. The doctor, Assistant Surgeon Thompson, is presented as a 30-year old man with black hair worn long, red eyes, and a ‘burly-looking’ yet deceptive face. His excessive kindness of manner is belied by shifty eyes whose sideward glances ‘could be translated only into a looking-out keenly after his own interest’. The writer goes on to note Thompson’s ability in ‘quickly discovering the good qualities of any officer who happened to have influential connexions, and commendably prudent in eschewing the society of such refractory youths as ventured to canvass the doings of their betters’. He had little direct interest in Captain Darnley, for Darnley had nothing more than his career, pay, and debts. To Thompson’s surprise, Darnley had no interest in India beyond his profession, where he was a popular officer. Unlike other officers, Darnley preferred his domestic life, and ‘economised to the utmost’. Consequently, Darnley was not a favourite of his commanding officer, Lieutenant Colonel Bore.

When asked by Anne when he was going to issue Darnley a sick certificate, which would allow him to sail home, Thompson was evasive: ‘of course, I should be unwilling to send him away, except in a case of absolute necessity, for his own sake’, he said, adding that furlough ‘adds so much to an officer’s term of slavery’, indicating the minimum period Darnley would have to serve in order to settle his debts. Anne disagreed with Thompson, and he riposted by stating that in his professional opinion, Anne rather than Darnley needed to travel home immediately. Offended, Anne refused, and asked Thompson for permission to Darnley to travel to the presidency headquarters and ‘see whether the medical gentlemen there disagree with you – whence we shall call on you for a statement of Darnley’s case and your mode of treatment’, she thundered. His ‘naturally red face’ glowing purple under this rebuke, Thompson strove to smoothen things by saying that he would, if necessary, issue the sick certificate. However, Anne remained obdurate and told Thompson that if the following day Darnley’s symptoms did not improve, he would apply for leave to the presidency headquarters, for the review of his case. Thompson quitted the Darnleys’ presence and after he had left, Anne called him ‘a base and time-serving wretch’.

Later, out in the garden, Darnley overheard Thompson’s conversation with another officer from the same regiment, Captain Ashton. Ashton was unfazed by Thompson’s fear of Anne’s rage. ‘To let Darnley once quit these shores without first getting fairly out of my way, will be actual destruction to my prospects’, Ashton said. Darnley was Ashton’s sole obstacle for promotion to Major. Ensigns and Lieutenants waited in queue for a vacancy to occur. Ashton reminded Thompson that he owed it to

them all to keep Darnley in India 'until he is fairly sickened', and only then to allow him to go home 'conditionally', or with the caveat that he would resign his commission. In return, Thompson wanted Ashton, who obviously had considerable influence, to put in a word for him at the Adjutant General's office for his appointment as chief of the 'Zillah of Bopore'. A civil appointment would get Thompson a higher salary and far brighter prospects than time-bound service as an army doctor. Unable to restrain his passion, Darnley stepped out of concealment and calling Ashton and Thompson scoundrels and cowards, challenged the former to a duel as soon as his health was restored. Ordered off the premises by Ashton, Darnley left after having warned them of dire consequences for conspiring against him.

This excitement led to Darnley's relapse. Soon after he had recovered, he was visited by the Adjutant, who placed him under arrest by order of Colonel Bore who, in connivance with Ashton and Thompson, had laid three charges for court-martial against Darnley. Under the general charge of conduct unbecoming an officer and gentleman, Darnley was accused of forcing himself into Ashton's presence, of having challenged him to a duel without provocation, and of having called Ashton 'liar and coward'. The court-martial would as surely remove Darnley from Ashton's path as sickness and resignation, for, if the charges were proved, the sentence would be dismissal from service. Meanwhile, even as Darnley recuperated slowly, his wife wrote to the commander-in-chief of the presidency, giving all the details of his sickness, of the manner in which Darnley had been baited by Bore and Ashton, and of Thompson's involvement, contrary to the rules of his profession.

The court-martial was conducted by the Judge Advocate General, and at its conclusion all, including Darnley, expected the sentence to be the worst possible for a career officer. The court sent its findings for confirmation by the commander-in-chief, who soon replied, ordering all European officers to attend the announcement at the Division Headquarters. While agreeing that Darnley had been intemperate in behaviour, the commander-in-chief commented that the provocation had been extreme, and Darnley's character was borne by the testimony of the majority of his fellow officers. He was released from arrest and restored to duty. The next day's orders removed Colonel Bore from command, and placed Ashton and Thompson under arrest pending court-martial at the presidency headquarters. Ashton and Thompson were dismissed the service, Darnley having testified at their trial. However, 'Darnley and his wife felt no triumph when they knew that their adversaries were disgraced and ruined'.

Instead, they travelled home, where Darnley obtained employment and built himself a beautiful home by the sea in one of the southern counties.

In viewing life for the European in India as 'a skeleton dressed in glittering robes' Darnley and his wife were echoing the same sentiments as Mrs Lushington. Philip Meadows Taylor, newly appointed to a commission in the army of the Nizam of Hyderabad, travelled from Bombay to Aurangabad in November 1824. The Western Ghats delighted Taylor: 'Deep glens and ravines, bounded by tremendous precipices; trees and flowers all new to me; fresh and invigorating air, so cold and bracing, and so like, so I thought, to dear old England!' However, when called up on active service during the monsoon the following year, Taylor soon fell ill with 'very severe jungle fever'. He recovered, suffered a relapse at Aurangabad, and was conveyed to Ahmednagar, which did not help. From Ahmednagar he was removed to Poona, where his life was again despaired of, and he was despatched thence to Bombay, where 'the pure sea-air' helped his recovery.

In addition to sickness, the European in Bengal (as in the rest of India) had also to contend with medical incompetence. One of the best contemporary pictures of everyday life for the European in India, is to be found in Captain G F Atkinson's *Curry and Rice (On Forty Plates) or, The Ingredients of Social Life at 'Our' Station in India* (1859). In the preface, Atkinson distinguishes between the classes among the English in India, the 'Qui Hyes' of Bengal, the 'Mulls' of Madras, and the 'Ducks' of Bombay, who 'adhere to, and defend their own customs with jealous warmth of feeling'. Atkinson's imaginary station is the village of Kabob, which is situated in the great plains of Dekchy, in the province of Bobarchy, within the presidency of Bengal. Kabob 'is bounded in the north and east by a mountainous range – of flaming brick-kilns, whilst on the south and west it is embraced in the tortuous sinuosities of a circumambient ravine populous with pigs'. Consisting of mud cottages and houses, Kabob is open to the vicissitudes of the harsh weather. There are 4 doctors in Kabob: Dr Goley, the Civil Surgeon, lives in the Civil Lines; Dr De Why attends to the soldiers of the artillery and the staff; Dr McGhee is Kabob's consulting physician and general practitioner; 'and all three repose beneath the superintending and vigilant glance of the great Dr Fogrum, whose responsible and arduous duties consist in permanently sitting as president of a standing committee to provide for the sick and needy in their affliction, by the administering of medical certificates, which enable the then joyful recipients to escape for a while from their exile in the shadeless plains'. Dr McGhee is 'of an acquisitive and accumulative turn of mind, which resolves itself into performances that

afford food for the amusement of the young blood of Kabob and the enlivenment of the coffee-shop'. Medicine and surgery no longer hold any interest for McGhee. In fact, the popular impression about him is so bad that 'the really sick ... are never admitted to his destructive powers'. Consequently, the 'Great Plague of Kabob' occupies his time 'in a more genial way, by devotion to the business of the Kabob Bank'. This is because Dr McGhee is a director of the bank, having established and originated it. Instead of looking to patients, McGhee 'does funny things in that quiet bank parlour', like 'cancelling shares in a peculiarly acquisitive, and not altogether unprofitable manner, and performing other delicate but lucrative operations, which augment and develop the resources of his individual purse'. In addition to his banking operations, Dr McGhee also has many other investments, including the *Kabob Chronicle*, which he solely owns. In between all his financial preoccupations, the doctor finds time to visit the hospital. However, Dr McGhee does not have the time to greet anyone, for "his thoughts are too much occupied with rupees and with what he can do to turn a penny out of someone at 'Our Station'".

Not all doctors were thus. The English owed the imperial *firman* allotting them landowners' rights to the villages constituent of, and territories around, Calcutta, to the skill of their surgeon, William Hamilton. Hamilton sailed as ship's surgeon aboard the East Indiaman *Sherborne* in 1709. The ship's captain, Henry Cornwall, was tyrannical and detested by his crew. After many problems between captain and sailors, the ship reached Calcutta late in the year 1710. Like his shipmates, Hamilton too must have suffered Cornwall's temper until he could bear it no more. Hamilton left ship on 3 May 1711, while it was at Fort St David. Thence he travelled to Madras. Cornwall applied to the council at Fort St George to have his surgeon returned. Hamilton disobeyed the council's order and proceeded to Calcutta, where he was appointed Second Surgeon on 27 December 1711.

The Mughal emperor, Farrukhsiyar, was cured of a lingering ailment by Hamilton in 1715, upon which he decided to keep Hamilton with him as his attending physician. However, due to Hamilton's fervent plea to be allowed to return to his wife and children in England, the emperor released him on the condition that Hamilton would resume his position at the imperial court immediately on his return. Hamilton and the rest of the English party returned to Calcutta in 1717, having finally obtained the elusive *firman* in June of that year. Hamilton neither went back to England, nor to the imperial court, for he died at Calcutta on 4 December 1717. Buried in the small cemetery that now adjoins St John's Church,

Hamilton's tombstone was rediscovered when the foundations for the church were being dug in Warren Hastings' time.

This was the second time in the history of the English in India that an English surgeon had obtained special privileges from the Mughal emperor. In 'the year of the Hegira 1046' [1636? 1644?], Jahanara, Emperor Shah Jahan's favourite daughter, was 'dreadfully burnt, by her clothes catching fire'. An English doctor was sought on the advice of the vizier, Asad Khan, and the council in Surat recommended Gabriel Boughton [Thomas Bowrey calls him 'Bowden'], the surgeon of the Company's ship *Hopewell*, 'a very Eminent Doctor of Phisick'. Boughton seems to have studied at Guy's Hospital, and according to legend, he travelled to the Emperor's camp in the Deccan, and succeeded in bringing about the princess's recovery. Thus began the tale of Boughton's success in Bengal. When asked by the overjoyed and magnanimous Emperor to name his reward, Boughton 'with that liberality which characterises Britons', sought nothing for himself. Rather, he asked that 'his nation might have liberty to trade, free of all duties, to Bengal, and to establish factories in that country'. A *firman* to this effect was soon granted, and Boughton proceeded to Pipli in Bengal.

Pipli is situated at the mouth of the river Ichamati, and its port had been used by the English since 1634. The first English factory on the east coast was established by Ralph Cartwright in 1633. When a ship from England reached Pipli 2 years later, its cargo was unloaded without the payment of any duties, thanks to Boughton's imperial permit. Boughton's tale does not end here. Shah Shuja (1616-1661), the Emperor's second son, became the governor of Bengal in 1641, and he would not have looked kindly upon Boughton's special permission, despite its being issued in his father's name, had fate not intervened. On Shah Shuja's assumption of the governorship, Gabriel Boughton went to pay him his respects at the provincial capital, Rajmahal. Just then, a lady of the governor's harem fell seriously ill 'with a complaint in her side'. Boughton was consulted, and he successfully treated the malady. This raised him immensely in the governor's esteem. Soon the *Lyoness* arrived from England, bringing on board James Bridgeman of the Company, who had been assigned to 'advance and increase the trade' in Bengal. London had received news of Boughton's imperial influence and permission, but his particular sway over the provincial durbar helped Bridgeman establish a factory at Hooghly in 1650-51. Little is known about Boughton after this, and he seems to have died around 1652. There are many inconsistencies in Gabriel Boughton's tale in the form in which it is related by various authors, and many think that he was sent to Agra not to attend

to any emergency but only because English doctors were much in demand, and Asad Khan felt one ought to be in attendance at the Imperial capital. In any case, Boughton's professional service certainly helped the English receive trade concessions in Bengal.

Medicines do not figure in the list of goods prescribed by Sir Thomas Roe as suitable gifts for the imperial court, and the emperor. Roe's advice was to give presents to the emperor as behove his position, such as Arras cloth, of silk and gold, rich stones, caparison and saddle per Indian designs, embroidered satin coats, or perhaps a crown set with small stones. While gifts undoubtedly helped obtain concessions, it was medicine that provided greater aid. Sir Thomas Roe was continually afflicted with various ailments throughout his stay in India, and this made him state, 'all my actions have been mingled with crosses and rubs that I might say I wrestled then walked towards my grave'.

Disease and death often resulted in seriously troubled minds. An example of this was Robert Needham Cust (1821-1909). Cust was an Orientalist, a formidable scholar, proficient in many languages, author of several books, and renowned lecturer. He had been to Eton and thence to Trinity College with the intention of taking a degree and being called to the Bar. However in 1840 he was offered a place at the East India College in Haileybury. Just as he had excelled at Eton, Cust left Haileybury as 'Senior', 'with gold medals and scores of volumes as prizes'. Cust titled the part of his autobiography that deals with his experience in India, 'Exile in India'. In Calcutta Cust became proficient in Bengali, Urdu, Persian, and Sanskrit, as a result of which he earned monetary rewards. He had a fine career and in 1855 he decided to use his entitlement of 3 years' furlough to go and see his father, who was ailing. This saved him from the worst effects of the mutiny but like all other Company officers he was ordered to India in 1857.

Writing with hindsight, Cust noted in his memoirs, 'This year, 1856, was the last happy year of my life: troubles gathered around me, from which I have never escaped'. His first wife, Marie Adelaide Hobart and their daughter came out to join him at Lahore in 1859. The following year his daughter fell so seriously ill that her life was despaired of, and he came to the conclusion that his family, which now included an infant son as well, had to leave for England at once if they were to live. He put them aboard a ship for home in November 1860. Exactly a year later, Marie Cust returned to India to re-join Robert, with their third child, an infant son. In June 1862 cholera struck the Punjab and Cust was tired with his work: 'I used to talk with my wife of what we would do when we got back

to England, for I was weary of India'. His memoirs thereafter list deaths and premonitions of final partings.

In 1863 Cust took stock of his achievements: 'I had attained some of the highest posts of the State, and had prospects of still higher ones before my eyes, but my ambition was quite gone'. This was written in retrospect. On 17 January 1864, soon after the birth of their fifth child, his wife died. He left India with his children in February: 'My career was finished, and I took leave of India, never intending or wishing to return'. However, at home he found himself quite unemployed, and seized an offer by Lord Lawrence to become a Member of the Legislative Council of India. He assumed this post in November 1864, and served for 3 months as Home Secretary. Suddenly he decided to leave India again, and this he did in April 1865, receiving at Cairo the news of his youngest child's death. Again he soon found no professional openings for him in England, and again he accepted Lawrence's offer of the post of Member, Board of Revenue, North West Provinces. He married his second wife, Emma Carlyon, in November 1865. With her he set off for India the following year. En route, his wife fell ill with a fever and she was landed in Calcutta in a serious condition and even though Cust was 'in a state of great despondency', she recovered and they went to Allahabad, where he was to stay. His wife was 'weak and poorly' and it was April, the beginning of the hottest season of the year. Cust was tormented by doubts: 'How I wished that I had not returned to India!' On 13 July 1867, in her second summer in India, Emma Cust suffered 'a shiver', following which 'the evil commenced' and she died on 10 August, despite 'a month of careful nursing and the most devoted attention on the part of the medical men'. In fact, the doctors had told Cust on 15 July that there was no hope. Cholera was raging in Allahabad and his wife, who had been pregnant, delivered a girl prematurely.

Cust's grief was too deep for words. He blamed himself: 'I had been the cause of a second sweet young woman leaving her home to die in India, only to die: a grave in each of the Capitals of the two great Provinces, at Lahore and Allahabad, records my unhappy destiny'. He laboured on for he had his little girl to look after, though he was probably not quite normal, for he admitted: 'I used to peep through the garden fences, and see my happy neighbours, husbands and wives, parents and little children, and I used to ask why I was thus tortured'. He feared he was becoming suicidal: 'In the solitude of an Indian bungalow, after the business of the day had been despatched, in my excited state of feelings, and with my overtaxed brain, and excitable temperament, I might be tempted to some rash action'. In November 1866 Cust obtained a medical

certificate to travel to England with his three-month old daughter. However, no matter where he looked, he saw disease and death take their terrible toll. During the interval of his arrival at Calcutta, and his departure, Cust received a letter from a former college friend, who begged his company, for his wife was dying. Cust responded at once, 'I went and found her just passing away, and sat by the side of the distracted husband the whole night'. The day before he left, Cust also consoled a very young lady, who had been widowed and left penniless. Her passage home had been arranged by friends. Cust found himself coming across 'other widows and widowers' on board the ship. Death seemed to follow him. In Cairo Cust asked after his cousin, posted in Egypt at the time, only to be told that the cousin had died the previous day in Alexandria. Cust's depression worsened: 'I felt keenly that with blasted hopes, ruined fortunes, legitimate ambitions crushed, opportunities of usefulness gone, I was creeping home like a cur, which had been flogged, or like a soldier, who had been cashiered, with one poor motherless child to add to the four other motherless children already in England'. At the age of 47, he had the alternative, so he wrote, of either dying or making a new life for himself in a new environment.

Cust listed the pros and cons of this new environment. Against official appointments and arrivals and departures by steamer, there were the new problems of 'reduced income, choice of residence, worry of a family'. Most of all 'The horror surrounding a Death in India is gone forever'. In saying this, Cust gave voice to the greatest concern of the European sojourner in India. Death had not been defied; it would come quietly, and "no telegraphic communications will disturb a party of young children at their tea, that 'Father is dead'". Writing his memoirs at the age of 80, Cust could exult that he was alive while a son of one of the Lieutenant Governors (probably a contemporary of Cust in the Company's service) was writing his father's life, a father whom he had never seen or known. There were others, like his former colleagues, Arthur Roberts and Cuthbert Thornhill, whose 'domestic happiness' Cust used to envy. They both died in 1868, even as Lawrence once more offered Cust a lucrative post in India, and he had only 9 months left to serve to secure his full pension of £1,000 a year. Roberts and Thornhill 'had served their time, which secured their pensions, were happy in the company of the wives of their youth and their children, *and both died in India*' [Cust's emphasis]. His Haileybury friend, Bellasis, had only a month to serve for full pension, and he went out to Bombay to complete this formality but died there. Yet money remained a problem, for in 1868 Cust resigned the service under medical certificate, and was awarded a pension of £450 a year. He underwent a