Public health in British India: Anglo-Indian preventive medicine 1859–1914

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Introduction

My main aim in writing this book has not been simply to provide an account of the development of public health in British India, but to explore its broader social and political significance. In so doing, I have ventured into largely uncharted territory, and I am acutely conscious of the fact that I have left many areas of public health in India uncovered. However, it is probably impossible to give a comprehensive account of public health in India within the confines of a single volume and, in any case, undesirable, given India's ethnic, epidemiological, and administrative diversity. What follows is a thematic study of several key areas of preventive medicine and public health, illustrating the theoretical, professional, and administrative aspects of its development. The latter dimension is examined at local, national, and international levels.

Although the subject of this book is a relatively new one, it was not conceived in a historiographical wilderness. The last decade, especially, has witnessed a surge of interest in the medical history of British India, and of the European colonies more generally. Much of this literature has been of an exceptionally high quality, and I owe a great debt to its authors for the insights they have given me. In this volume I do my best to address many of the questions and issues raised in this literature, while offering many explanations and interpretations for which I, alone, am responsible. I have found it necessary to take issue with some of the claims made by certain scholars, and to qualify or modify the arguments of others, but this book does not represent a fundamental historiographical revision. Indeed, it is probably unwise at the present time to speak of a scholarly consensus with respect to medicine in India, for much of the literature has been of an exploratory nature. Moreover, the only universal theme in this literature – the limited scope and effectiveness of colonial medical intervention – is one which I endorse.

This book differs from most existing scholarship chiefly in the weight it gives to certain factors in explaining these limitations and, in particular, the importance of political relationships with sections of the indigenous population.

It also stresses to a much greater extent the active role of Indians as policy makers at local and municipal level; the varied and often conflicting viewpoints of colonial administrators and medical officers; and the importance of practical constraints, such as local revenues. Another important difference lies in the conclusions which are drawn about medicine's role in the consolidation of imperial rule in India. Preventive medicine, I argue, was less central to this process than is sometimes imagined.

Medicine's role as a 'tool of empire' is probably the most familiar theme in the historiography of colonial medicine to date, and has its origins in the writings of colonial medical officers and imperial politicians. Their principal concern was with the health of Europeans in the tropics, and especially of troops – the ultimate guarantors of imperial rule. The vulnerability of Europeans in the tropics has also formed the subject of several more recent studies, most notably Philip Curtin's 'The White Man's Grave' and *The Image of Africa*, which were published in the early 1960s.[1] Curtin's latest book – *Death by Migration* – returns to the same theme, with a study of 'relocation costs' among European soldiers in the tropics between 1815 and 1914. Here, Curtin emphasises the human costs of empire, but argues that improvements in hygiene and medicine began to make a significant impact on mortality among European troops from the middle of the century.[2] In a similar vein, Daniel Headrick, in his influential *Tools of Empire*, lists medicine among several technologies which proved crucial to the success of European expansion and dominion over large parts of the globe.[3]

These studies have done much to illuminate an important and neglected dimension of imperial history, although they perhaps raise as many questions as they answer. As David Arnold has pointed out, Headrick's reading of the evidence is rather selective, and he certainly exaggerates the effectiveness of medical intervention in the form of quinine prophylaxis against malaria.[4] More serious is Headrick's emphasis on means rather than motive. Was it, perhaps, imperial expansion which provided the stimulus to technological innovation, rather than the inverse relationship which Headrick describes? Certainly, the absence of effective medical intervention did not prevent the development of plantation agriculture in the West Indies, the British conquest of India, French dominion in Algeria,[5] or the Dutch presence in the East Indies.[6] Equally, Curtin's analysis of relocation costs does not address the effects of high mortality on European *perceptions* of the tropics or its implications for the colonial enterprise. His exclusive emphasis on mortality rates also gives the impression that the threat posed to European colonialism by disease declined considerably from the middle of the century. But, as I attempt to show in chapters 2 and 3, especially, morbidity rates present a very different picture, and were a major cause of anxiety well into the twentieth century. It was not mortality from diseases such as cholera, but the persistent incapacitating effects

of malaria, typhoid, and venereal disease which most concerned colonial authorities.

It was not only in the military sphere that medicine came to be viewed as a 'tool of empire'. In the early eighteenth century, medicine entered the discourse of economic efficiency, with inoculation against smallpox introduced on slaving vessels, and limited medical provisions being made for slaves in plantations in the West Indies and the Americas.[7] But medicine did not become prominent in the rhetoric of empire until the late nineteenth century, following concerns over colonial indebtedness, and with the growing political importance of imperial themes. For the colonial secretary Joseph Chamberlain, medical progress seemed to offer the prospect of improved labour efficiency, and the opening-up of hitherto impenetrable areas of the tropics.[8] One manifestation of this 'constructive imperialism' was the establishment of the London School of Tropical Medicine in 1899, while the Liverpool School, founded the previous year, was promoted by mercantile interests as an investment in colonial trade.[9] These notions persisted into the interwar period, although economic adversity made governments more reluctant to intervene. Such texts as Balfour and Scott's *Health Problems of the Empire* – published in 1924 – were written largely to convince British and colonial administrations of the economic utility of medical intervention.[10] How far such considerations shaped public health policy in India is, as yet, little understood. I argue here that the gap between rhetoric and reality was considerable.

Medicine has also been viewed as an instrument of 'social control' in the colonies, providing means of 'knowing' the indigenous population, and rationales for social segregation. In an influential article of 1977 Maynard Swanson described how the presence of bubonic plague in the Cape Colony provided a pretext for racial segregation, with public health officials at the forefront of such demands.[11] Indeed, fear of infection from the indigenous population served to reinforce segregated residential patterns throughout colonial Africa,[12] and to some extent in India.[13] More generally, public health measures have been viewed as powerful tools for the domination of indigenous peoples. These took the form of selective and degrading medical intervention,[14] detention and isolation,[15] controls on population movement,[16] and demonstrations of colonial benevolence intended to reduce resistance to imperial rule.[17] It is also claimed that medicine played an important role in the creation of the colonial subject, although how far the negative images portrayed in colonial medical texts affected indigenous peoples' understanding of themselves is still largely unknown.[18] The role of medicine as a 'colonising discourse' is considered in chapter 2 of this book, while the subsequent chapters assess the extent to which public health measures were conceived in terms of 'social control', and their effectiveness in performing this function. I argue that medicine both shaped and reflected an increasingly negative view of India

and its people, but that the desire to control and contain the indigenous population was checked by the political and economic imperatives of colonial rule.

Another major theme of this book concerns contradictions and rivalries within the imperial order itself, and the way in which these were illustrated or exposed by debates on public health. I argue that the relationship between colonial priorities and medical policies was much less straightforward than has generally been suggested.[19] The formulation of public health policy is, perhaps, best understood as a contest between two different conceptions of empire. The one, authoritarian and paternalistic, emphasising Europe's 'civilising' mission in the tropics. The other, liberal and decentralist, stressing the constraints imposed upon government action by shortages of revenue, indigenous resistance, and competing claims on the resources of local and central government.[20] I aim to show how these different conceptions of empire manifested themselves in the administration of public health from central government down to district and municipal commissions.

Although the development of public health in British India reflected the relative dominance of these competing imperial ideologies, it was affected also by prevailing attitudes and events outside the subcontinent. The importance of medical issues in relations between the imperial 'metropole' and the colonial 'periphery' was a theme which I first began to explore in an analysis of the international sanitary conferences and their effects on colonial trade, and the annual pilgrimage of Indian Muslims to Mecca and Medina. I argued that international pressures to restrict the passage of Indian vessels through the Suez Canal exposed a cleavage between the British and Indian governments. The former taking a stance diametrically opposed to the wishes of the Indian government, compelling it to pursue a sanitary policy which threatened to jeopardise its relations with the Muslim community.[21] Here, I elaborate upon this theme using additional evidence concerning the role of Muslim élites in the pilgrimage controversy, and with reference to imperial interference in other spheres of public health.

In addition to the imperial determinants of sanitary policy it is necessary to consider the attitudes and responses of indigenous peoples themselves. At present very little is known about Indian responses to colonial medical initiatives, although excellent work has been done on the political dimensions of the Indian plague epidemics of 1896 onwards.[22] However, the fate of indigenous medicine under colonial rule has attracted more attention, and demonstrates both competition and accommodation between western and traditional systems; though with the displacement of certain specialisms such as bone setting and lithotomy.[23] Together, these studies suggest the importance of medicine as an index of convergence and divergence between eastern and western cultures; a theme which is developed in the present study through an examination of Indian

responses to public health measures, and the role of Indians in the policy-making process at municipal and district level.

It is argued that the dominance of indigenous élites in municipal administration from the 1870s, and European fears of provoking the Indian masses after the mutiny/rebellion of 1857, were two of the most important factors shaping the development of sanitary policy in India. The need to co-opt indigenous élites into the governance of India, and to avoid civil unrest, acted as a brake upon authoritarian elements within the British administration, and fostered an official approach to public health based on co-operation rather than confrontation. However, frustration with the slow pace of reform in many cases served to increase tension between the Anglo-Indian and indigenous populations. Many Europeans (and Indian Muslims) resented moves towards self-government which resulted in the dominance of local administration by the majority Hindu community, and demanded a reversal of these reforms in the name of sanitary progress. Hindu municipal commissioners were, themselves, divided over the question of sanitary reform. The rhetoric of reform was appropriated by modernising nationalists, but contested by more orthodox sections of the community, and by the landed interests who had most to lose from increases in local taxation, or regulations concerning rented properties. These themes are considered in chapter 7, together with other factors affecting the development of sanitation under local self-government, and in a more detailed way in chapter 8 – a case study of Calcutta. In the latter, I argue that the economic interests of the city's Indian *rentier* class constituted the single greatest obstacle to sanitary reform.