Leprosy in Bengal, C. 1873-1956

A THESIS SUBMITTED TO THE JADAVPUR UNIVERSITY FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN ARTS

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Certificate

Certified that the thesis entitled **Leprosy in Bengal, C. 1873-1956** submitted by me for the award of the Degree of Doctor of Philosophy in Arts at Jadavpur University is based upon my work carried out under the Supervision of **Prof. Mahua Sarkar,** Department of History, Jadavpur University, and that neither this thesis nor any part of it has been submitted before for any degree or diploma anywhere/elsewhere.

Countersigned by the Supervisor

Date:

Signature of the Candidate

Date:

Acknowledgement

There should not be any disagreement in the academia on the fact that the social history of medicine or medical history is one of the most aspiring and promising areas among the social science disciplines. Since 1980s, scholars have succeeded, so far, in making of novel methodology to explore the subject with a different, rather distinctive approach. This thesis, while keeping its pace with this understanding, is about to explore the manifold ways through which leprosy and the leprosy sufferers were objectified, seen, and perceived in the late nineteenth and first half of the twentieth century Bengal. As of now, little has been done in the social history of leprosy in colonial India except the works of Jane Buckingham, Sanjiv Kakar, Biswamoy Pati, and Chandi P. Nanda. However, there is hardly any comprehensive study on colonial or postcolonial Bengal. Therefore, hopefully this work will at least fill up the existing void. As a researcher, it is always difficult to acknowledge those who, as being anonymous, have provided invaluable observations, suggestions, and assistances. The unconditional academic aids of these unsung 'benefactors', such as from learned passers-by to librarians, from gleaners of rare books to archivists, from coffee house critics to institutional ideologues, are proved to be prerequisite in every research, especially in the field of social science. These 'resources' pragmatically have helped me to fathom the narratives, largely obtained from the archives, libraries, and digital platforms. The tangibility of primary archival sources and the subtlety of numerous interpretations or reinterpretations are nonetheless the major factors, invigorating my quests to reveal newer avenues of understanding. In this regard, I would like to express my gratitude to my supervisor Prof. Mahua Sarkar. Without her relentless guidance and perseverance, this thesis would remain unfinished. I would also thank Prof. Nupur Dasgupta,

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Dedicated to

Maa and Baba

Contents

Abbreviations

AIIHPH	All India Institute of Hygiene and Public Health
APAL	Association of People affected by Leprosy
ASHA	Accredited Social Health Activist
BELRA	British Empire Leprosy Relief Association
BLSC	Bengal Leper Settlement Committee
CABH	Central Advisory Board of Health
CIDC	Central Indigenous Drugs Committee
CMC	Calcutta Municipal Corporation (now Kolkata Municipal Corporation)
CMS	Church Missionary Society (now Church Mission Society)
CSTM	Calcutta School of Tropical Medicine
DKC	Deepak Kumar Collection
GOB	Government of Bengal
GOI	Government of India
GoWB	Government of West Bengal
HKNS	Hind Kusth Nivaran Sangh
IDSK	Institute of Development Studies, Kolkata
IHCS	Integrated Health Care Services
IJL	International Journal of Leprosy
ILA	International Leprosy Association
IMS	Indian Medical Service
INC	Indian National Congress
LCDC	Leprosy Case Detection Campaign
MDT	Multi Drug Therapy
NAI	National Archives of India
NAK	National Archives, Kew
NDCP	National Disease Control Program
NFCP	National Filaria Control Program
NL	National Library, Kolkata
NLCP	National Leprosy Control Program
NLEP	National Leprosy Eradication Program
NMML	Nehru Memorial, Museum, and Library
NSEP	National Smallpox Eradication Program
OSA	Odisha State Archives
SAB	Scientific Advisory Board
SLAC	Sparsh Leprosy Awareness Campaign
SLEC	Sparsh Leprosy Elimination Campaign
WBSA	West Bengal State Archives
WLC	Wellcome Library Collection

Illustrations

CHAPTER 1

Introduction

"if the *Brahmana* fed in a *Sraddha* is a *Mahisika* (husband of an unchaste woman), a *Svitri* (one suffering from white leprosy) or a *Kusthin* (leper), that *Sraddha* shall be entirely yours."

Skanda Purana (SKP) VI.187.43[1]

"A victim of leprosy suffers more pain and when he starts losing his thumbs, hand and nose, he becomes really very ugly. But it is not that he suffers more pain because he becomes ugly. I would say that we should have greater contempt for people who have wicked hearts. A person who has unclean body which is the result of an unclean mind and who has a perverse outlook, instead of listening to the *Bhajans* is interested in listening to the stories of wicked men, is real leper."

Mahatma Gandhi, Speech at Prayer Meeting, New Delhi, October 23, 1947[2]

The present study focuses on colonial language, expressions, and practices that examined or perceived leprosy as 'social threat' or 'problem population' and medicalized the leprosy sufferers through the institutional 'care' in Bengal since the late nineteenth century till the mid twentieth century. It begins with 1873 when the causative agent of leprosy, i.e. *mycobacterium leprae*, was discovered by G.H.A Hansen. After which, this malady eventually has been popularized as 'Hansen's disease'. This thesis chooses 1956, when the Albert Victor Leper Hospital (Abolition) Act was enforced, as the 'curtain call' of this work. Making a meta-narrative of the disease out of the colonial narratives on and encounter with the medical culture of the British Raj is not the distinctive aim of this thesis; rather, it tends to explore how the medical and political objectivities of the physicians, the colonial state, the institutions, and the society or '*samaj*' comprehended leprosy and the sufferers as deviants to the health, body, and mind. The epistemic pursuit of colonialism had twirled the notion of power, especially in medicine, which differentiated the pre-

[1] *Skanda Purana (SKP), Book 6 (Nagara Khanda), Part 17* (New Delhi: Motilal Banarsidass Publishers, 1958), 781.
[2] Nehru Memorial, Museum and Library (hereafter NMML), *the Collected Works of Mahatma Gandhi, vol. 89* (New Delhi: Government of India, 1983), 393.

colonial orientation towards the 'diseased' from the systematic and 'scientific' exclusion of unhealthy in the colonial period. It does not entail that the colonial medicine posited a complete rupture from the knowledge regimen, prevailing over the decades in India, and practised by the professionals or amateurs even in the waning years of the British rule; but, the extent of convergence/intervene of the state and society during the Raj, with newer mechanisms of 'science', 'legalism', and 'politics' in an unprecedented way, was truly complicated and, therefore, pluriform in nature. Except some diminutive ragtag,[3] the absence of academic studies on leprosy in pre-colonial India accelerates the effort of finding the prior perceptivity about the disease before engaging into the colonial insights of leprosy. The issues of segregating the 'lepers' and the response of the state concerning the disease are much contentious areas pervaded with uncertainty. The mention of 'leper' communities outside the villages or cities in the puranic and pre-colonial texts, at least, makes us aware of the custom of isolating the sufferers; however, whether this practice was put into effect by the state or directed by the social dictums is a matter of concern amongst the scholars. As leprosy was a treatable disease, by using chaulmoogra oil and other herbs, the specific details of the treated individuals or people could be extricated from the inventories of '*dawaikhana*' or '*bimaristan*'. Alongside, the pilgrim centers and temples in India received large number of 'leper beggars' for ages that might draw the attention of the researchers working in the field of pre-colonial social history of medicine.

The 'charity' to leprosy sufferers or 'leper beggars' was, nevertheless, a global phenomenon, performed by the affluent families or sometimes by the state as far as the beginning of the historic period; but, the way, in which 'care' was conceptualized, ideated, and gestated in the

[3] Jagdish Chandra Jain, *Life in Ancient India: As depicted in the Jain Canon and Commentaries, 6th Century BC to 17th Century AD* (New Delhi: Munshiram Manoharlal, 1984), 180; A story of a 'leper' king Rama of Banaras has been cited in J. P Sharma, *Republics in Ancient India, C.1500 B.C to 500 B.C* (Leiden: Brill, 1968), 209 and in Bimala Churn Law, *Tribes in Ancient India* (Poona: Bhandarkar Oriental Research Institute, 1943), 290.

colonial era through the missionaries, had been a significant development in the notion of nineteenth century 'altruism'. What is more appealing in this piece of 'civilizing mission' is the explicit co-operation, existing between the colonial state and the missionary bodies. Taking references from the Madras Presidency, Jane Buckingham has rightly pointed out that initially leprosy in India was considered as medical and government subject than that of missionary responsibility. Furthermore, the Bengal and Bombay Presidencies offered lesser government aided facilities for the care and treatment of the leprosy sufferers than the Madras province. To Buckingham, the colonial government had transferred the accountability of leprosy institutions to the societies and missionary groups and provided financial assistance for the maintenance of the asylums only after passing the Lepers Act of 1898.[4] In contrast to this view, Jo Robertson has somewhat contended the schedule of this shift of 'power' from state to missionary groups. She has argued that the missionary works proved to be a model for the government institutions from 1886 when Wellesley Bailey came to India. The changes in asylum management took place since then.[5] Both these contentions are much important in the study of leprosy in colonial India. These works, although, have not discussed how far this idea of compassion or 'care' to the leprosy sufferers had been entwined with the emerging 'scientism' since the last decade of the Victorian period. Especially, the 'care' was more associated with 'cure' after the foundation of the bacteriological laboratories in the Raj and the appearance of London and Liverpool School of Tropical Medicine in 1899. Buckingham has talked about the role of *Sidddha* medicine and indigenous medical tradition in the leprosy treatment in colonial south India that, in turn, shaped the colonial medicine. As for sure the European medicine had a significant effect in the southern part of the Indian subcontinent, the resilient indigenous remedies in tandem were present both in

[4] Jane Buckingham, *Leprosy in Colonial South India: Medicine and Confinement* (New York: Palgrave, 2002), 2.
[5] Jo Robertson, "The Leprosy Asylum in India: 1886-1947," *Journal of the History of Medicine and Allied Sciences* 64, no. 4 (June, 2009): 487.

the twentieth century international medical world and South India. To Buckingham, leprosy in colonial India was based on the dual functioning of cooperation. For the accomplishment of institutional confinement, the colonial administration needed the support and compliance of leprosy sufferers; likewise, to prevail over the indigenous methods, the British medicine required to have cooperation of the sufferers with the 'modern' British treatments. Leprosy research in colonial India, which was instrumental in the progress of 'scientific medicine', had been partly self-determining from and nonaligned with Britain.[6]

The European research was responsible for the transformation of 'medical culture' in India and the 'professionalization of medicine' in Britain as well. In this negotiated condition, the leprosy investigation from the 1870s, on the other hand, had presented an arguable ground in the power struggle of professional and legal spheres of the colonial state. It was reflected in the academic conflict, for example, between the Indian Medical Service (IMS) and the sanitary departments of the central and provincial governments. The disagreement, on who would be 'confined' amongst the leprosy sufferers and what shall be the conditions of internment, emanated from within the levels of government, public sphere, medical, and legal clouts. Inquiring the Foucauldian notion of power where, to Buckingham, resistance has no place as a 'constitutive element in the history of power', the British and Indian authorities in South India resisted to or partially ratified the idea of confinement and the leprosy sufferers appeared to be elemental to the formation of British power.[7]

This work has attempted to problematize the concept of 'negotiation' and 'resistance' while exploring the correlation of 'leprosy' and the 'lepers' with the political and social trajectories of

[6] Buckingham, *Leprosy in Colonial South India*, 5-6.
[7] *ibid*, 6.

power in Bengal. It was not much 'negotiation', but the dynamics of persuasion that, from 1870s onwards, refurbished the matrix of colonial medical science, the debates over segregation, and confinement of the 'lepers'. The persuasive structure of colonial hegemony has directed the scholars to review the subtlety of 'power-resistance' pattern, observed in leprosy asylums and colonies. In 1996, Sanjiv Kakar has exhumed the intricacies of resistance in the asylums of colonial India that to some extent contradicted what Buckingham has articulated later. Medical intervention, as Kakar has concluded, in the leprosy management in the colonial phase had been exceptionally restricted which affected only a little portion of the patients. This happened despite having lack of 'resistance' by the Indian elites to governmental endeavors, depriving the colonial governance of its primeval justification about the Indian antagonism to the public health programs.[8] Kakar has less stressed on the recurring attempts of finding suitable medical cure of leprosy in the 1860s and 1870s in his article, but, it is also true that there was limited success in curative medicine related to leprosy prior to twentieth century. Thence, the discourse of confinement, medical supervision and engagement, religious tenets, and the participation of *bhadraloks* in creating manifold perceptions, ranging from epistemic or literal 'segregation' to 'curing the ills' to 'leprosy' and the sufferers, is to be analyzed in this thesis taking Bengal Presidency largely into account. Leprosy in southeast Asia, like the other communicable diseases in the tropics, certainly intrigued the European travelers since their arrivals in the Indian Ocean, partly because of its association with the biblical figure like Saint Lazarus[9], and the appearance of 'leprous bodies' including their treatments in the corpus of the European medieval Christian

[8] Sanjiv Kakar, "Leprosy in British India, 1860-1940: Colonial Politics and Missionary Medicine," *Medical History* 40, no.2 (1996): 227.
[9] David Marcombe, *Leper Knights: the Order of St. Lazarus of Jerusalem in England, c. 1150-1544* (Woodbridge: Boydell Press, 2003), 3-4.

thoughts[10] and the numerous lazarettos that existed in Europe till the seventeenth and eighteenth century.[11] The metaphors, phrases, observations, and perceptions about 'leper' and 'leprosy' would be the founding principles on which a sort of nascent representation of the disease initially burgeoned in the Raj as the colonial knowledge on 'diseases' in India was often shaped by the 'information'.

The materialization of knowledge had reproduced the apprehension towards the management of the diagnosed, which was resolved either by persuasion or coercion, until the advent of bacteriological research in India. With the incessant rummage around a liberal ideology, appropriated into the political environment of the British India, the political elites including their symbolic behavior, i.e. rhetoric and ritual, formed the basis of public cultural[12] during this phase of 'tropical disease' research. That kind of 'cultural liberalism', as a colonial derivation, had debarred the affected individual or medically unfits from participating in the emerging cosmopolitan ethos. Was the 'diseased' perceived as a threat to the cosmopolitanism? If so then, could it be one of the most stimulating rationales which was more appealing, than the public health crisis, to the colonial state to prevent the 'lepers' from engaging with the social intercourses? These questions are raised in the following thesis.

With introduction and conclusion, this work is divided into six chapters, encompassing the diverse understandings of legality, *scientism*, the forms of 'care', and politics of health from 1870s to the mid twentieth century mostly. This thesis mostly caters the colonial rhetoric of 'leprosy' and the sufferers in Bengal. The first chapter is the *Introduction*. The following chapters deal with the four specific issues that altogether fasten the beads into a single string.

[10] Michelle M. Sauer, *Gender in Medieval Culture* (New York: Bloomsbury, 2015), 41.
[11] Michel Foucault, *Madness and Civilization: A History of Insanity in the Age of Reason*, trans. Richard Howard (New York: Vintage Books, 1988), 1-6.
[12] Douglas E. Haynes, *Rhetoric and Ritual in Colonial India: the Shaping of a Public Culture in Surat City, 1852-1928* (Berkeley: University of California Press, 1991), 1-10.

The second chapter of this thesis, i.e. *Colonialism, Empire, and Legislation*: *The Problematic of Medico-Legalism and Colonial Laws on Leprosy in Bengal, c.1890 to 1947*, will discuss how the idea of 'degeneration' and 'desolates' shaped the colonial legality and its persuasive configuration. The colonial governance and bureaucracy, through creating supposed 'awareness' among the Indian public, permitted the state to resort to conformity and dominance without drawing on coercion, although, coercion had been still the crucial foundation of the colonial state.[13] Some scholars prefer to study the intricacies and particulars of the nature of medical encounter in the colonial world which goes beyond the model of 'dominance and coercion'. Mark Harrison has argued that the public health in British India was largely relied on the cooperation of local elites and the indigenous response to the western medicine. The international pressure and the direction of colonial office, when the issues like sanitary cordons, quarantine, and segregation came up during the epidemics like cholera and plague, had compelled the Raj to undertake repressive measures. However, the British administrations resorted to indigenous cooperation whenever possible in this regard. Harrison seems to be more analytical in approach and intends to question whether medicine was at all a 'tool of empire' while concentrating on inner vitality of colonialism and the colonized society. On the other hand, Sanjoy Bhattacharya has found that the vaccination programs in small pox in colonial India had engaged with several political, social, and religious factors. Opposition to vaccination had been founded on 'fear' to medical problems, religious reservations, and class reflection. Thus, public health policies in colonial India were outlined by various restraints such as defects in local vaccination and medical administration, especially seen in rural areas. Bhattacharya, Michael Worboys, and Mark Harrison have analyzed the Raj, which was 'fractured' from the beginning,

[13] Sabyasachi Bhattacharya, *the Financial Foundations of the British Raj: Ideas and Interests in the Reconstruction of Indian Public Finance 1858-1872* (New Delhi: Orient Longman Pvt. Ltd., 2005), 79-83.

in a nuanced way in which the success of vaccination programs depended on the indigenous bureaucrats, local municipal, and district boards.[14] The British Raj found it rather difficult to segregate the entire leprosy population, however, the 'purification' or 'sanitization' of the colonial minds, through legal enactments on leprosy in order to avert the 'fear of degeneration', affected the empire during the late nineteenth century. Degeneration, as an idea, was far more problematic than 'degenerates'. Starting with the Leprosy Commission of 1890-91 and the Lepers Act of 1898, the chapter shall delineate the complexities, intricacies, and vitality of notions on 'segregation', of course not in a unilinear way, appearing in leprosy, vagrancy, and municipal acts in colonial Bengal vis-à-vis India.

The third chapter of this thesis, i.e. *Objectifying 'Lepers', Constructing Identity*: *The Colonial Gaze with 'Caring Minds' towards the Leper Asylums in Bengal, c. 1873 to 1956*, will be discussing the works of missionary organizations, especially the Mission to Lepers and the Church Missionary Society (CMS), among the leprosy sufferers in Bengal since 1874. This chapter intends to see how far the missionary asylums were different from that of the government asylum like Albert Victor Leper Asylum, Gobra, or whether the managements and mechanisms, based on race, sex, and gender, had been identical in both forms of institution. In leprosy asylums of India, the management of leprosy sufferers was equally not uniformed, even if there had been certain commonalities, persuasions, and aphorisms in the rules and regulations. The Madras Leper Hospital had followed segregation on the basis of race and gender by the end of nineteenth century. It was the first hospital which set up separate accommodation for

[14] Mark Harrison, *Public health in British India: Anglo-Indian preventive medicine 1859-1914* (Cambridge: Cambridge University Press, 1994), 2-4; Sanjoy Bhattacharya, Mark Harrison and Michael Worboys, *Fractured States: Smallpox, Public Health and Vaccination Policy in British India, 1800-1947* (New Delhi: Orient Longman, 2005), 1-9; Sanjoy Bhattacharya, "Re-devising Jennerian Vaccines?: European Technologies, Indian Innovation and the Control of Smallpox in South Asia, 1850-1950," in *Health, Medicine and Empire: Perspectives on Colonial India,* eds. Biswamoy Pati and Mark Harrison (New Delhi: Orient Longman, 2001), 259-62.

European and Indian patients. In 1890, such arrangement was proposed in Calcutta.[15] Rod Edmond has seen segregation of leprosy sufferers as a much diverse idea in the British Empire. In India, compulsory segregation was problematic to the British government and only the vagrant lepers were segregated, while, this had been usual among the island and littoral communities, such as Fiji, Ceylon, and Malaya. For Edmond, the racial distinction seemed to be sharper in Robben Island, South Africa, after the implementation of the 1892 Act.[16]

But, the colonial state in India had endured the segregation of sexes in the asylums with minimal expenditure in the treatment of leprosy. The army, Europeans, and commercial interests were less threatened by the existence of leprosy; this made the Raj inclined to contribute for the asylums more than carrying out substantial medical programs till 1920s. However, the pressures from the Europeans and Indian elites, who had been scared of 'contagion', forced the administration to take greater official intervention. Since 1889, when the draft bill on segregation was circulated amongst the local elites, colonial officials, landlords and princes, they complied largely with the colonial perceptions about 'leper' management except issues like religious freedom and caste differences.[17] David Hardiman has observed that the missionaries considered leprosy in sturdily 'Biblical terms'. They encouraged the sufferers to come for the treatment and stay in the asylums or colonies. On the other hand, the Lepers Act of 1898 served the non medical agendas of both the governments and missionaries as well. To Hardiman, Christian environment of these institutions influenced the inmates to get converted. Sometimes, the inmates of the asylums protested against the segregation policies and disobeyed the rules which

[15] Buckingham, *Leprosy in Colonial South India*, 48.
[16] Rod Edmond, "Abject bodies/ abject sites: Leper islands in the high imperial era," in *Islands in History and Representation*, eds. Rod Edmond and Vanessa Smith (New York: Routledge, 2003), 133-40.
[17] Sanjiv Kakar, "Medical Developments and Patient Unrest in the Leprosy Asylum, 1860 to 1940," in *Health, Medicine and Empire: Perspectives on Colonial India*, eds. Biswamoy Pati and Mark Harrison (New Delhi: Orient Longman, 2001), 196.

resulted into excommunication by the missionaries.[18] Shobana Shankar is of opinion that many women in northern Nigeria feared of segregation in the leprosaria and avoided the missionaries who were supposed to force them.[19] It is true that both confinement and medical intervention had worked together in colonial India since the twentieth century, but, the missionary activities formed a sort of linkage between colonial administration and 'medicalism' perhaps in a more subtle way from 1890s.

The fourth chapter, i.e. *Institutionalization of Medical Research*: *The Leprosy Research in the Calcutta School of Tropical Medicine (CSTM) from 1914 to 1955*, will delineate the interlacing issues of colonialism, tropical medicine, and leprosy research since the foundation of Calcutta School of Tropical Medicine (CSTM) till 1955 when the National Leprosy Control Program (NLCP) was finally launched by the postcolonial state. In this section, the internal history of leprosy diagnosis, treatment, and cures will be discussed while contextualizing the CSTM and the contemporary politics. The curative medical culture was not completely unknown to the indigenous populace; but there was often a considerable shift from curative to preventive medicine, requiring larger involvement of the 'public', during the Raj.[20] The indigenous curative culture was undermined by the colonial officials after the foundation of western medicine through newly erected hospitals and dispensaries, precisely from 1830s; the existing literatures, although, have put little emphasis on how far the colonial power in British India shoved on the curative biomedicine or preventive measures against the epidemics and at the same time made a distinction between the two forms of 'colonial medicine'. The term 'colonial medicine' is itself a

[18] David Hardiman, "Introduction," in *Healing Bodies, Saving Souls: Medical Missions in Asia and Africa,* ed. David Hardiman (New York: Rodopi, 2006), 33-35.
[19] Shobana Shankar, "The Social Dimensions of Christian Leprosy Work among Muslims: American Missionaries and Young Patients in Colonial Northern Nigeria, 1920-40," in *Healing Bodies, Saving Souls*, ed. David Hardiman (New York: Rodopi, 2006), 281-84.
[20] Mridula Ramanna, "Perceptions of Sanitation and Medicine in Bombay, 1900-1914," in *Colonialism as Civilizing Mission: Cultural Ideology in British India*, eds. Harald Fischer-Tine and Michael Mann (London: Anthem Press, 2004), 205.

problematic nomenclature in this regard. Was it really 'colonial' or was there anything '*colonial*' in medicine without the encounter and response of the indigenous medical culture? The idea of contagionism as an imperial concern and bacteriological researches on tropical diseases appeared emphatically in the late nineteenth century. Tropical medicine, as a discipline, emerged first in England during this phase when it became a distinguished field of professional practice, research, and teaching. It spread throughout western world including France, Germany, Italy, and later on United States. Michael Worboys is of the view that scientific specialties, such as tropical medicine, were related to the external social and economic factors because of their association with the European imperialism. Moreover, the scholars have stressed on the emergence of western medical theory and practice in the tropical areas by means of the establishment of tropical medicine.[21] The enclaves in the colonized areas, mostly the hilly terrains, were the specified places where tropical medicine and the colonial state developed a network. From Kasauli to Darjeeling, this network had ultimately formed the basis of institutionalization of medical research vis-à-vis colonial scientism. Nandini Bhattacharya has suggested that public health in colonial India should be identified with the atypical institutions of the colonial economy and society. For example, Darjeeling and its plantation enclave in north Bengal had been closely linked to the 'essential of colonial functioning, governance and economic productivity' that revolved around disease and its management. Here, the plantations and sanatoriums in Darjeeling represented these colonization processes.[22] In a similar way, Pratik Chakrabarti has found a propitious relationship between imperialism and medicine. For him, the medical knowledge or science would be comprehended within a 'spatial and temporal' location and how it is

[21] Michael Worboys, "the Emergence of Tropical Medicine: a Study in the Establishment of a Scientific Specialty," in *Perspectives on the Emergence of Scientific Disciplines,* ed. Gerard Lemaine (Chicago: Aldine Publishing Company, 1976), 75.

[22] Nandini Bhattacharya, *Contagion and Enclaves: Tropical Medicine in Colonial India* (Liverpool: Liverpool University Press, 2012), 1-10.

transmitted to other areas along with the political equations needs to be explored.[23] Not only in case of British Empire, was the imperial logic, behind a civil vision of science and medicine, always refashioned in a specific colonial setting. The political rationality of American colonialism had been enmeshed with the triviality of traditions, everyday contact, and bodily practice in a colonized locale. Warwick Anderson has suggested that by experiencing 'hygiene', the medical officers in colonial Philippines had undergone, experienced, and felt the ideas of empire and race in the initial years of twentieth century.[24] Alongside, certain institutions too were engaged in making of this academic discipline, i.e. tropical medicine, as a tool of colonial understanding about pathology and pathogens. Helen Power has asserted that Liverpool and London School of Tropical Medicine (1899) both contributed to body of knowledge concerning tropical medicine. They prepared the colonial medical officers for inspecting the deadly 'tropical' pestilences in the peripheries and accorded with the colonial directives as part of 'their health care programs'. A holistic, but uniform, medical pedagogy paved the way for newer priority in colonial public health.[25] Were these imperialist and racial discourses embedded in the 'tropical medicine' detrimental to the medical research in the twentieth century? These concepts, ranging from coloniality to curative biomedicine, are much pertinent in investigating the colonial drive or 'call of the hour' about finding suitable curative medicine for leprosy as well.

The fifth chapter of this thesis, i.e. *Nationalizing the Disease: '**kustha cikitsha'* and '*kustha rogi' in Bengali Vernacular Print Media and Health Periodicals, c. 1880 to 1955,* takes the manifold ways of nationalization of '*kustha cikitsha*' into account by analyzing the Bengali vernacular

[23] Pratik Chakrabarti, *Western Science in Modern India: Metropolitan Methods, Colonial Practices* (New Delhi: Permanent Black, 2004), 3; *Medicine and Empire 1600-1960* (London: Palgrave Macmillan, 2014), ix-xii.
[24] Warwick Anderson, *Colonial Pathologies: American Tropical Medicine, Race, and Hygiene in the Philippines* (Durham: Duke University Press, 2006), 1-2.
[25] Helen J. Power, *Tropical Medicine in the Twentieth Century: A History of the Liverpool School of Tropical Medicine 1898-1990* (Abingdon: Routledge, 2011), 3-6.

medical journals, newspapers, and articles. The transformation from 'colonial state' to an independent nation or nationhood is not an easy, straightforward, and uncomplicated process; rather, it produces a collaborative and contested space that redefines the metaphors, motifs, and narratives about 'nationalism'. Scholars like Manu Goswami and Benjamin Zachariah, have argued that the concept of development and nationalism in India is different from that of western nationalism. The Indian nationalism and nationhood came out of engagement with the colonial political economy from the late nineteenth century, followed by the Gandhian era that revolutionized the political ecology of national movement and led to the creation of 'developing nation'. This had become a guideline in the Nehruvian world of progress.[26] But, the question is whether nationalism or developing state had succeeded to get rid of the colonial contradictions implanted in the public health system. The problem was about the model through which the nationalization of 'care' could be viable in the British Raj. The foremost concern of the national politics was to build 'national health' either by means of modernizing or rationalizing the indigenous medicine or by internalizing the western biomedicine. Seema Alavi has harped on the nature and degree of interface that Islamic healing tradition have had with the society and politics, rather than the state, from 1600 to 1900.[27] Projit Bihari Mukharji, Shinjini Das, Rachel Berger, Madhuri Sharma, and Burton Cleetus have altogether harped on the nature and extent of nationalization in the colonial medicalism. However, a group of scholars have also pointed out that INC and the twentieth century nationalist leaders had not been much concerned about the nationalization of '*ayurvedic*' medicine. David Hardiman has intended to illustrate that Gandhi had recommended '*vaids*' to study from allopathic medicine while rejecting the idea, i.e.

[26] Manu Goswami, *Producing India: From Colonial Economy to National Space* (Chicago: the University of Chicago Press, 2004), 1-8; Benjamin Zachariah, *Developing India: An Intellectual and Social History C. 1930-50* (New Delhi: Oxford University Press, 2005), 4-10.

[27] Seema Alavi, *Islam and Healing: Loss and Recovery of an Indo-Muslim Medical Tradition, 1600-1900* (Basingstoke: Palgrave Macmillan, 2008), 1-10.

'Ayurveda is an adequate science'. In 1938, Nehru, walking on the Gandhian path, became skeptical when he stated that '*ayurveda'* appeared to him as an 'incomplete' form of knowledge. Surely, the period of high politics in 1930s and 1940s restrained the congress leaders to distance them from '*hindu*' derivation of '*ayurveda'*.[28] But, Gandhi was a 'cynical enthusiast' about the regeneration of '*ayurvedic'* research even after the establishment of provincial governments in 1937.[29] As far as leprosy and leprosy sufferers are concerned, Gandhi often underscored the need of '*atmasuddhi*' and listening '*bhajans*' along with the medical treatment. Moral and physical ailments, to him, were the predicaments of purity; therefore, by treating the leprosy patients, Gandhi drawled on purification of mind, body, and soul connected to the regeneration of 'national health'. His idea of constructive program was based not only on village sanitation or education in health and hygiene but also on the eradication of 'lepers'. In this context, he received assistance from his associates like T.N Jagadishan, Vinoba Bhave, Baba Amte, and Manohar Dewan.[30] Gandhi personally treated several leprosy patients amongst which Parchure Shastri, who was a Sanskrit scholar and freedom fighter, had been cared in Sevagram, Wardha district of Maharashtra.[31] Moreover, the '*Harijan*' often raised issues concerning leprosy sufferers and their problems in India with Gandhi's messages.[32] The way in which these 'national' remedies, i.e. largely '*ayurvedic'*, along with the allopathic biomedicine created an environment of medical pluralism in late colonial Bengal is brought under the discussion.

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[28] David Hardiman, "Indian Medical Indigeneity: From Nationalist Assertion to the Global Market," *Social History* 34, no. 3 (August, 2009): 263-283.
[29] NMML, Private Paper Archives and Manuscript Section, an interview of Dr. Lakshmipathi with Gandhiji relating to 'Is Ayurveda to be studied or the British Pharmacopea to be enlarged?,' M.K Gandhi Papers (Pyarelal Papers), XVth Inst., Subject File, S. No. 372, Year 1939.
[30] NMML, Private Paper Archives and Manuscript Section, Individual Collection, T.N Jagadisan, Acc. No. 1324**;** NMML, M.K Gandhi Papers, (Pyarelal Papers), XVth Inst., writings by him, File no. 83, year 1945; Hans Staffner S.J, *Baba Amte: A Vision of New India* (Mumbai: Popular Prakashan, 2000 third edition), 10-11.
[31] Saurav Kumar Rai, "Leprosy, Gandhi and Parchure Shastri," https://www.livehistoryindia.com/history-daily/2020/10/02/leprosy-gandhi-parchure-shastri.
[32] NMML, Microfilm Section, Harijan Collection, 1935-1946.

Nevertheless, how far the 'lepers' or 'leper beggars' became the social threat to the Bengali *bhadraloks* rather than leprosy and in what ways the disease was seen as the degeneration of 'health' are also to be conferred in this segment. The four chapters, thus, put forth the socio-medical and political narratives of leprosy in a dynamic way with an aim to explore the processes of objectification of leprosy sufferers, the disease, and public health in colonial and postcolonial Bengal vis-à-vis India.

The last and sixth chapter is the *Conclusion*, winding up the arguments and looking into the research gaps.

This thesis is primarily based on archival sources which include Public Health Proceedings, department of Home, DGIMS (Director General of Indian Medical Service), Local-self Government (Medical) and Education, and Private Papers or Personal Correspondences. The archival materials at the National Archives of India, Bhubaneswar and New Delhi, the Odisha State Archives, Bhubaneswar and the West Bengal State Archives, Kolkata, the Private Papers of Nehru Memorial, New Delhi, and Visva Bharati Archive, Shantiniketan are extensively studied during the fieldwork. For the contemporary Bengali periodicals, newspapers, medical and non-medical journals and primary texts, the National Library, Kolkata and Bangiya Sahitya Parishad, Kolkata are worth exploring. The governmental and medical reports, for example the reports of Indian Research Fund Association, journals on leprosy and other contagious diseases are largely available in the libraries of All India Institute of Hygiene and Public Health and Calcutta School of Tropical Medicine that have been also to a large extent reviewed.

This work is an empirical research relied largely on quantitative method. From the point of view of social history of medicine, there is a considerable difference between the methodologies of disease research before and after 1947. This thesis has dared to trace the new trajectory of

medical history up to 1956 which concretizes the research questions and hypothesis. For the latter part of my chronological lap, the Bengali vernacular periodicals, journals of Calcutta School of Tropical Medicines, Five Year Plans, and other primary sources are taken as reference.

CHAPTER 2

Colonialism, Empire, and Legislation: The Problematic of Medico-Legalism and Colonial Laws on Leprosy in Bengal, c.1890 to 1947

For being a suspected 'leper', a local bench magistrate, Subramanya Chettiar was asked to submit his renunciation in 1890**.** While he refused to accept such 'accusation' as true, Chettiar had affirmed that not in any circumstances would he stand down from the position**.** For which, the Judicial Department of Madras requested him to turn up before the medical board**;** but surprisingly the findings of that medical trial has remained unspecified. Another incident happened in 1893, when a first clerk of the sub-registrar's office, Cherpalcherri, at Calicut, was proclaimed as leprosy patient and the suspension was left in abeyance for the time being. He appealed the Madras Civil Medical Board which certified him 'free of leprosy' in March, 1894.[1] This exclusionist notion towards the leprosy sufferers remained so even fifty years later. On 25th November 1946, Dr. Sir Alagappa Chettiar had sent a letter to the Secretary to the Government of India, Post and Air Departments in which he grumbled that the authority did not provide him a ticket in the Tata's aircraft as he was suffering from an infectious disease, i.e. leprosy. Simultaneously, the Indian National Airways declined him to give a passage in the Deccan Airways, citing the same reason. Was this incident an accusation on the part of Mr. Chettiar? Mr. Chettiar was under the treatment of Dr. R. G Cochrane for over two years and the doctors, according to Chettiar, assured him about taking part in 'social activities and travel about in public conveyances without in the least causing any danger to public health'. Being a leprosy patient, he was nominated as a member to the Syndicate of Madras University by the Governor

[1] Jane Buckingham, *Leprosy in Colonial South India: Medicine and Confinement* (New York: Palgrave, 2002), 34.

of Madras and also as the member of the Army Resettlement Board of which the Governor himself was the Chairman. This letter, however, induced a crucial problem within the Communication and Public Health Department in the last days of the British Raj. The Public Health Commissioner, Government of India (hereafter GOI) Col. E. Cotter intended to investigate the matter earlier in a personal correspondence with Dr. Cochrane. To Cochrane, Mr. Chettiar did not constitute a 'danger' to others passengers by air travel. This statement, somehow, appeared to be misunderstood by Cotter considering Mr. Chettiar as 'closed case' who was no longer capable of infecting others. Cochrane had refused to certify Mr. Chettiar as 'closed case', though; he vehemently criticized the way leprosy patients were being barred to travel by air or by any other means.[2] Col. Cotter put forward the resolution which was previously discussed by the Central Advisory Board of Health (hereafter CABH) and adopted by the Council of State on 27th Feb, 1941, dealing with the question of preventing the inflicted persons from traveling the public conveyances:

"This council recommends to the Governor General in Council that adequate steps be taken forthwith to prevent and sufficient checking be imposed by the authorities concerned upon, the travelling of lepers and persons suffering from dangerous diseases such as tuberculosis in railways, steamers and buses and also from haunting public places like hotels and restaurants so that the progress of the dangerous diseases which are eating into the vitality of the Indian nation be checked."[3]

[2] National Archives of India (hereafter NAI), Government of India (hereafter GOI), File no. 30-35/47 P.H II, Ministry of Health Department, Public Health Branch, subject Carriage in Public Conveyances of Persons inflicted with Leprosy-Legislation, 1947.
[3] NAI, GOI, File no. 30-35/47 P.H II, the Letter from Colonel E. Cotter, the Public Health Commissioner (GOI) dated 9th January, 1947 to the Communication Department, ibid.

But, the CABH found it difficult to enforce such laws, although, it recognized the importance of restricting infected people to use the public conveyances. Mr. Cotter, after realizing the magnitude of the problem, finally called for a legislation concerning the issue and suggested the Health Department to form an expert committee which would make recommendations relating to the leprosy inflicted passengers. Till then, Cotter was unable to regard Mr. Chettiar as 'constituting no risk to his fellow passengers'.

This incident was undoubtedly a unique one which impelled the Public Health Department of GOI to commission the Expert Committee consisting of Dr. Dharmendra from Leprosy Research Department of Calcutta School of Tropical Medicine (CSTM), Dr. R. G Cochrane from Missionary Medical College for Women, Vellore, Dr. C. G Pandit, the Director of King Institute Guindy, Dr. H. H Gass, Medical Officer in Charge of Chandkuri Leprosy Hospital, Central Provinces; Prof. T. N Jagadishan, Rai Bahadur Dr. A. C Banerjee, Public Health Commissioner of United Provinces and Dr. S. N Lahiri, the Principal Medical & Health Officer of G.I.P Railway, Bombay. The Committee's first meeting was held on 15th July, 1947, just a month before independence, wherein several hitherto existing acts, that restricted the travel of infected people via public transportation, were reviewed.[4]

Aforesaid illustrations divulge the practice, means, and methodology of British public health system, relied on the exclusionist policies**.** To expel these office-bearers from the government posts or prohibit people, especially those were accused of or construed as 'lepers', to use public conveyances**,** the Raj sought to defend the 'authoritative framework' while ensuring the fact that contagion must not wreck the imperial image of the 'public' faces**.** When the report of the

[4] NAI, GOI, File no. 30-35/47 P.H II, the Letter from Colonel E. Cotter, the Public Health Commissioner (GOI) dated 13th March, 1947, ibid.

Leprosy Commission in India was published in 1893, it engendered continuing controversy swiveling the notion of segregating leprosy patients.[5] The reason was to marginalize the afflicted people in the society and to 'purify' or sanitize the colonial mind [or body] by the legal enactments preventing the fear of degeneration that had affected the empires during the late nineteenth century. Previously, the Galton's theory, before his *Hereditary Genius* appeared in 1869, triggered the eugenic ideas which were espoused across the political curve of western hemisphere. To form the 'desirable' races by eliminating the 'undesirables', was the aim, rather the solemn duty, of the colonial states in general. [6] With the consistent symptomification of *degenerescence* reflected in the writings of French literati intellectuals such as Buchez, Taine, Le Bon, Sorel, and Zola, the European states had undertaken a sort of preemptive course of action against the 'communities' which were believed to be pervading the corrosions in intellectual and material prosperity as well.[7] This was something that unprecedentedly influenced the colonial legality to frame the models of prosecution countering with the 'discontents to the civilization'. Max Nordau[8] in his '*Degeneration' or 'Entartung'*, dedicated to Caesar Lombroso, who was the professor of psychiatry and forensic medicine at the Royal University of Turin and one of the proponents of the degeneracy, conceptualized the idea by typifying the communities having discordant relationship with the progressives:

[5] See *Leprosy in India: Report of the Leprosy Commission in India, 1890–91* (Calcutta: GOI (Central Printing Office), 1893) [hereafter, Report, Leprosy Commission].
[6] Richard A. Soloway, *Demography and Degeneration: Eugenics and the Declining Birthrate in Twentieth-Century Britain* (North Carolina: University of North Carolina Press, 1995), 18-21.
[7] Daniel Pick *Faces of Degeneration: A European Disorder, c.1848-c. 1918* (Cambridge: Cambridge University Press, 1989), 4-6; Marja Harmanmaa and Cristopher Nissen (eds.), *Decadence, Degeneration, and the End: Studies in the European Fin-de-Siècle* (New York: Palgrave Macmillan, 2014), 1-5.
[8] Max Simon Nordau (29th July, 1849-23rd January, 1923) was an author, social critic, physician and ardent Zionist leader. Being a proponent of the idea of 'degeneration', he strongly favored 'muscular Judaism' for the Jewish community.

"Degenerates are not always criminals, prostitutes, anarchists and pronounced lunatics; they are often authors and artists. These, however, manifest the same mental characteristics and for the most part of the same, somatic features, as the members of the above-mentioned anthropological family, who satisfy their unhealthy impulses with the knife of the assassin or the bomb of the dynamiter, instead of with pen and pencil."[9]

The text, appearing in 1895, was considered as essential reading in the contemporary academia. These groups of people seemed to be a threat to the healthy environment, ensuring 'security' and 'sanity' in the society. Therefore, the overriding principles of degeneration had been supplanted from individual and family to society. This fear, traversing the entire European continent in the waning years of the nineteenth century, persuaded the British mind in theorizing the importance of racial potency. While developing the image of 'habitual criminal' through the particular narratives, the eugenics movement and the legal positivism (or continental positivism) in England formed the English social theory and law. Daniel Pick has pointed out that in case of British society; it was well shielded as a response to the alleged need for 'social defence', because the state seemed not frequently to be exposed to the degeneration. But, the popular concern about the 'Outcast London' during 1880s and the disillusioned new-liberal view of 'democracy, mass society, and urban life' around the last couple of decades of the Victorian period, were increasingly coaxed by the biological theories of decline. Degeneration, as the state perceived antinomy to the civilization, became the major issue than that of 'degenerates'. Similarly, the advent of Turner's 'frontier thesis' in 1890s, shaping the American history since the late eighteenth century, paved the way for the necessity of political dominance of 'civilized'

[9] Max Nordau, *Degeneration*, trans. William Heinemann (London: popular edition, 1895), ix; original German text was published in 1892 but translated into English only in 1895.

over the *native* frontiers or on the 'rogue culture'.[10] Nevertheless, the colonial powers faced immense difficulty to modify the laws or to imprison the 'troubles'. [11] This anguish had originated elsewhere. The Darwinist theory of natural selection, presented by Francis Galton in a newer fashion, incited the British minds to consider themselves as one of the superior races endowed with providential competence to rule. A feeling of doubt had popped up amongst them when Britain's economic ascendancy was seriously challenged by industrialized and commercially expansive states like Germany and United States during 1880s and 1890s. Even, the ability of the British Empire to expand or to preserve its existing market had been under scrutiny. The agricultural and industrial depressions, along with the piercing imperial rivalries in Africa, had driven many people to doubt the resilience of their state's attainments and its hegemonic position in this ever changing balance of powers. Situation worsened in early twentieth century, after the demise of Queen Victoria in January, 1901. The prolonged era of promises, progress, and hope was now going to be followed by the period of destruction, debility, and 'degeneration'.[12] People, what Spengler had envisioned during the First World War, started believing in the decline of the 'West'[13] caused by persistent degeneration. Hence, the deformity, in 'ideas' or in physical appearance, was thought to be the only reason behind such deterioration. Leprosy Commission in 1890-91 had duly addressed the issue of deformity but the ambiguity about the ways of segregation remained in its report. Since then, till the threshold of independence, the colonial course of action regarding prohibition or segregation**,** though not compulsory**,** [precisely the Lepers Act of 1898] of leprosy sufferers in British India was put into

[10] Frederick Jackson Turner, *the Frontier in American History* (New York: Henry Holt and Company, 1920), 1-5.
[11] Pick, *Faces of Degeneration,* 8-32.
[12] Soloway, *Demography and Degeneration,* 1-4.
[13] See the preface of Oswald Spengler, *the Decline of the West, vol. 1 and 2,* trans. Charles Francis Atkinson (London: George Allen and Unwin Publishers, 1928); it was originally published in 1918 in German.

effect with measly alterations**,** even after the recommendations submitted by the Bhore Committee in 1946. However, it surely by no means offers a kind of facile generalization which shrugs off the inherent complicacies of the colonial laws. This chapter will focus on that particular intricate relationship between empire, colonialism, and colonial legislations while apprising the issue of segregation or prohibition that had been entangled with the British hegemony. The chapter is divided into several sections; first section, i.e. Part I, offers a theoretical overview about the concepts of legality, legalism, and the 'prohibition', it also probes into the broader context of imperialism within which the British Raj had to work. The second section of the chapter, i.e. part II, III, IV, V, and VI, deals with the detailed analysis of selected colonial laws regarding leprosy and the 'lepers' with special reference to colonial Bengal; this section is followed by the third one, i.e. part VII, which sums up the arguments, that have been put forward in previous sections, in brief. To what extent, the British GOI was able to reduce the friction between the Leprosy Commission of 1890-91 and the Special Executive Committee of National Leprosy Fund? Whether the policy of segregation or prohibition, after protracted impasse amongst the lawmaking bodies, was adopted or not, especially in the colonial Bengal? What was the nature of segregation in the Raj? Was the British government able to implement the compulsory segregation in India? What were the colonial legal perceptions about leprosy in Bengal vis-à-vis India till the transfer of 'power'? What role did the Raj play within the medico-legal space existing between provincial and central legislations? These questions should be dealt with in this chapter comprehensively.

Legalism, Legality, and Medico-Legal Space: A Critical Review of Literature

Before hacking into the central arguments relating to the colonial legislations on leprosy in Bengal, certain issues need to be grappled with. The word 'medico-legalism' signifies the very

precise language of seeing, that classifies the medical 'divergence'. It purports a sort of scrupulous understanding, shaping the legal orientation to deal with the criminal jurisprudence which seriously challenges the foundation of legal system.[14] Especially, when it contains the medical issues like insanity, the criminal jurisprudence is transformed into medico-legal problems. For example, the Anti-abortion legislation during the nineteenth century England was to some extent significantly influenced by the outcry of medical profession, condemning abortion as crime. But prior to 1938, the very year was largely remembered for the *Bourne* case,[15] the operations had been performed without the presence of therapeutic specifications in the anti-abortion legislation. It seems that medical professionals were often directed by their own medical ethics and 'morality', which were subject to change, rather than legislations. Thus, the legal medicine, as a concept, have had relied upon the 'legal' [which is highly subjective] perceptions of physicians more than that of legality provided by legal bodies.[16] Robert A. Nye, while addressing the medicalization of national decline in France during the late nineteenth century, has pointed out that medical men claimed to have expertise in previously non-medical fields. From 1880s onwards, the crimes such as; alcoholism, prostitution, suicide, and other social pathologies were included along with insanity in the agenda of French medicine. Physicians and psychiatrists, therefore, made an effort to inflate their domain; though, they had been frequently requested to do so by the policy makers, administrators, and legal bodies, i.e.

[14] Michel Foucault, *the Birth of the Clinic: An archaeology of medical perception*, trans. A.M Sheridan (New York: Routledge, 1989), 1-3.

[15] In 1938, a famous trial was held in London in which Aleck William Bourne, who was renowned British gynecologist and author, was accused of performing illegal abortion of a 14 year old rape victim. He was acquitted on charges of procuring abortion later. The Lancet, one of the leading medical journals, had commended his deed as "an example of disinterested conduct in consonance with the highest traditions of the profession".

[16] John Keown, *Abortion, doctors and the Law: Some aspects of the legal regulation of abortion in England from 1803 to 1982* (New York: Cambridge University Press, 1988), 49-78.

those who defined the 'popular culture'.[17] Hence, the medico-legalism is an idea embracing a) the clinical and post-mortem investigations performed by surgeons, midwives or physicians under the directions of legal officers or tribunal, b) all kinds of medical testimonies presented as evidence to the investigating magistrates, and c) the issues relating to medical certificates for legal requirements.[18] The legal perceptions with reference to leprosy in colonial India, apart from its socio-cultural dynamism, have to be brought under the purview of medico-legalism which is largely unaddressed in the studies of Indian scholars.[19] When empirical research on tropical diseases, at the late nineteenth century, had succeeded to distinguish leprosy as an atypical malady from other skin diseases, the imperial power sought to perceive both the leprosy and 'leprous bodies' through the sense of colonial legality. The movements of leprosy sufferers/patients were observed, controlled, and sometimes debarred by the legal authorities since pre-modern period, although, colonialism had reoriented the idea of legalism by framing the notion of 'universalism'. Colonial knowledge, being a language of command, conceptualized the ways of knowing that categorize the maladies.[20] Eventually it helped the British Raj to formulate the public health policies for identifying the causation of diseases and preventing the infliction. Therefore, the objective of British government was to ascend over the 'medical space' of India eliminating the 'other' forms of legality that did not correspond with the colonial

[17] Robert A. Nye, *Crime, Madness, and Politics in Modern France: The Medical Concept of National Decline* (New Jersey: Princeton University Press, 1984), 3-43.
[18] Michael Clark and Catherine Crawford (eds.), *Legal Medicine in history* (New York: Cambridge University Press, 1994), 2.
[19] Harshit Sinha, *Leprosy in India: A Study in Medical Geography* (Jaipur: Rawat Publications, 2000), 1-10; Sanjiv Kakar, "Leprosy in British India, 1860-1940: Colonial Politics and Missionary Medicine," *Medical History* 40, no. 2 (1996): 215-30; Sanjiv Kakar, *The Rise of the Leprosy Asylum in Nineteenth-Century India* (London: Institute of Commonwealth Studies, University of London, 1994), 1-8; Biswamoy Pati and Chandi P. Nanda, "The leprosy patient and society: Colonial Orissa, 1870s-1940s," in *The Social History of Health and Medicine in Colonial India,* eds. Biswamoy Pati and Mark Harrison (New York: Routledge, 2009), 113-25; Simkie Sarkar, "Coping with Leprosy in 19th Century Colonial Bombay," in *History of Medicine in India: The Medical Encounter,* eds. Chittabrata Palit and Achintya Kumar Dutta (New Delhi: Kalpaz Publications, 2005), 111-16.
[20] Bernard S. Cohn, *Colonialism and its Forms of Knowledge: the British in India* (New Jersey: Princeton University Press, 1996), 3-15.

legislations relating to the contemporary public health measures. The medical treatments in the pre-modern societies were associated with the additional therapeutics aiming to purify the mind and the soul. However, the archaeology of medical knowledge had undergone immense transformation from the late eighteenth century when 'reason' gradually replaced beliefs, the prisons became correction houses, and the fear became public health risk.[21] Despite the changes in the perceptions, leprosy could not get rid of the social stigma which still remains in the popular psyche. Even after the organization and development of institutional medical research and the transfiguration of biomedical thoughts in the belle époque, leprosy continued to be one of the loathsome diseases that needed more of charity than treatments both in the colonies and the metropole.

The colonial public health system, some scholars would prefer to call it as 'state medicine', had prepared the fabric of rationale through which the disease was dissected, scrutinized, and classified. The problem lies in the hierarchy of this lay-out. Having infinite layers in the colonial administration, the officialdom failed to be a linkage between the various governmental bodies and was not able to understand the labyrinthine medico-legal ideals associated with the diseases, like leprosy, that existed in the colonized society. Emphasis was given to the constructions of new asylums, the research on tropical diseases, and also the state surveillance not only over the pauper lepers or vagrants but over the inmates of leprosy asylums to prevent the escapes.[22] On the other hand, the Indian Medical Service (IMS) was alleged to have monopolized the medical treatments and policy formations in such a way that the non-IMS freelancer researchers could hardly get the government support for experimentations in the asylums. Notwithstanding it, the

[21] Foucault, *The Birth of the Clinic*, x-xiii.
[22] Kakar, "Leprosy in British India, 1860-1940," 220-22.

question of mass awareness against the social taboo of leprosy had been often raised in official reports, frequently discussed in public forums, and reappeared in conferences, but nominal measures were taken until the mid-twentieth century. For Tirthankar Roy and Anand V. Swamy, the enactments in the British Raj were designed by dual process of formalization. The bureaucratic structure of colonial state was ready to homogenize the laws of India that were customary in nature in the pre-colonial era. Secondly, as an alien cultural import, the British system of knowledge had to encounter with the indigenous legal ideas and institutions. It is to be noted that, according to legal origins hypothesis, the British imperialism had brought English laws into India shaping the Indian laws which proved to be more effective than that of legal forms in other colonized territory. [23] But the contention is somehow one sided exploration, leaving the complicacies of legality. Preeti Nijhar is of opinion that the dynamics of imperialist projects in colonial India are to be understood within the broad canvas of empire, colonialism, and post-colonialism. The colonial legislations, regulating the lives of subalterns in both English and Indian societies, had identified and reified the 'dangerous' castes and classes by using the new concept of criminality. Undoubtedly, the idea of degeneration played a major role in the making of these enactments. Racial discourses influenced the policy makers, elites of the state, in processing legal preventive measures to purify the 'dangerous' class/caste or to segregate the stinky classes from the society. Nijhar has brought the term 'social contagion' into play which undermines the social stability. The colonial laws were made to restrain such emanating threats and to avow inequalities prevailing in the society.[24] [25]

[23] Tirthankar Roy and Anand V. Swamy, *Law and the Economy in Colonial India* (Chicago: The University of Chicago Press, 2016), 1-2.
[24] Preeti Nijhar, *Law and Imperialism: Criminality and Constitution in Colonial India and Victorian England* (New York: Routledge, 2016), 1-2.

Scholars are of opinion that 'public health' as a concept emerged only in the nineteenth century, though, the idea of protecting the population's health has been one of the cardinal accountabilities of European nation states since the fifteenth century. The mercantilist philosophy which considers healthiness as wealth of nation has intended to become a compatible theory of safeguarding the 'public' from dreadful pestilences. Although, the main objective of this philosophy is to control the spread of communicable diseases and reduce the infant mortality, it was not compatible with the mechanisms of the colonial states, which implemented the policies over the subjects coercively or systematically from the above without having adequate understanding of the discordant reality. It shows that the changing concepts of right to health and the *weltanschauung* of democratic citizenship hardly made an imprint on the quasi-federal structure of British India; instead, the paternalistic attitudes of colonial states in devising policies often overshadowed the liberal ideals of inequality. As far as mercantilism is concerned, shaped by democratic and bureaucratic ideals, it largely fails to explain the complexity of the word 'public'.[26] To the British Raj, 'public' had more become a derogatory word when it was used to describe the colonized subjects or *natives*. In short, the western notion of public health did not conform to the South-Asian idea of State Assistance Programs (SAP), and GOI was not at all willing to analyze the deep structure of encounters relating to the vaccinations, confinements, and regulations on contagious diseases. On the contrary, the administration had often depicted these encounters as popular resistances against the development in colonial medicine and public health. The indigenous elites, political pressure groups, and non-IMS practitioners would not have left the chance to denounce the governmental initiatives by

[25] Nicholas B. Dirks, *Castes of Mind: Colonialism and the making of Modern India* (New Jersey: Princeton University Press, 2001), 5.
[26] Sandhya L. Polu, *Infectious Disease in India, 1892-1940: Policy-Making and the Perception of Risk* (New York: Palgrave Macmillan, 2012), 2-22.

mobilizing people into the anti-colonial movement. However, the dilemma regarding the nature of colonial medical policies was still persisting within Indian National Congress (INC). Before the emergence of Gandhian paradigm, the INC gave immense priority to the Indianization of IMS but the perspective was getting changed from 1920s when the emphasis had been shifted more to the study of indigenous, '*ayurvedic*', and folk medicine rather than western medical thoughts.[27] The utility of studying '*ayurveda'* and '*unani-tibb*' was endorsed by INC in the resolutions, passed in 1918 and 1920. However, not all the leaders had responded to the indigenous medicine with affirmative approach. David Hardiman has shown that Gandhi and Nehru both had been incredulous to the efficacy of '*ayurveda*'.[28] Whatsoever, the Congress continued to support the indigenous medicine. Two committees on the inquiry into the indigenous medical systems were formed by the Governments of Bengal and Madras.[29] Needless to say, that these hardly made any difference to the public health regulations relating to the confinement of infected people.

Legalizing *disease*: Debates over Colonial Legislations on Leprosy, c. 1889-1911

Apparently, the idea of compulsory isolation became a worldwide phenomenon from the late nineteenth century, but it was not uniformly applied across the British Empire. Rod Edmond has pointed out that the African colonial governments were unable to enforce segregation due to the lack of resources, but his observation about colonial India is somehow questionable. It is true that most relentless implementation of compulsory segregation of leprosy sufferers happened in the island colonies like Caribbean islands, or Cape Colonies in the Pacific, and Indian oceans

[27] Polu, *Infectious Disease in India,* 22.
[28] David Hardiman, "Indian medical indigeneity: from nationalist assertion to the global market," *Social History* 34, no. 3 (2009): 263-283.
[29] David Arnold, *the New Cambridge History of India: Science, Technology and Medicine in Colonial India, vol. 3, part 5* (New York: Cambridge University Press, 2004), 183-84.

where the settlers were mainly European.[30] In case of British India, this idea did not hold water. For Jane Buckingham, the colonial law in India was 'as limited a tool of Empire as medicine'. The diffusion of power was visible in the British legal response to the disease, particularly in the manifestations of the law of confinement. Often, the fissures appeared within the ideologies and structures of the state affecting the decision making in general. Resistance of leprosy sufferers to the authority had become a crucial 'constitutive element in the history of power'. Moreover, the effectiveness of colonial policies on leprosy was simply based upon the willingness of leprosy sufferers. The British authority situated them at the 'center' from where the power was disseminated to the 'periphery'. In colonial south India, most of the leprosy sufferers succeeded to escape from confinement, though, the legal, cultural, and medical structures of indigenous and British community had an impact on their lives.[31] Buckingham is quite critical about the policy of confinement, presenting the inherent dynamism of colonial perceptions towards leprosy. Here, this chapter intends to explore the manifold dimensions of the legislation, the idea of legalism concerning the confinement, and the encounter of colonial legal authorities with the accused of having leprosy and the 'real' sufferer in Bengal.

The British Raj, was often perceived as the 'paper-work Empire', had no adequate, empirical, and extensive information about leprosy population in India prior to 1872 when the first census appeared; a new section was introduced in the census, naming 'infirmities', in which some specific 'deformations', i.e. deaf-mute[32], blindness,[33] insanity[34] and leprosy[35], were brought

[30] Rod Edmond, *Leprosy and Empire: A Medical and Cultural History* (New York: Cambridge University Press, 2006), 143.
[31] Buckingham, *Leprosy in Colonial South India*, 191.
[32] See Harlan Lane, *When the Mind Hears: A History of the Deaf* (New York: Vintage Books, 1989), xiii-xvii; John Vickrey Van Cleve (ed.), *Deaf History Unveiled: Interpretations from the New Scholarship* (Washington D.C: Gallaudet University Press, 1993), 3-9; Horst Biesold, *Crying Hands: Eugenics and Deaf People in Nazi Germany*,

under the colonial enumeration. However, the Raj initially did not take any heed to those frailties except embarking on quantitative documentation to furnish a pile of facts and figures relating to the existing deformed bodies in colony, even the issue of legislation concerning leprosy was not critically considered till 1890s.[36] The medical world, on the other hand, was still divided on whether the compulsory segregation could truly stem the contagion. To the colonial authority, the problem was more momentous than it seemed to be, as the British legality took a crack at homogenizing the indigenous concepts, discourses, and derivatives on infectious diseases or '*rog*' and the diseased or '*rogi*' that had shaped the medical enquiry since pre-colonial period. Within this imminent conflict between the British legalism and indigenous cultural milieu of colonized, the colonial state had preferred to contend with the emerging conundrums gently. The GOI was hesitant to take compulsory or absolute segregation as the means to control the spreading of leprosy germ during 1888-89. In the resolution of 26th September, 1888, the colonial government showed its disinclination to do more than providing grants to the medical

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trans. William Sayers (Washington D.C: Gallaudet University Press, 1988), 1-9; Paddy Ladd, *Understanding Deaf Culture: In Search of Deafhood* (Buffalo: Multilingual Matters Ltd., 2003), 1-25.

[33] See Zina Weygand, *The Blind in French Society from the Middle Ages to the Century of Louis Braille* (Stanford: Stanford University Press, 2009), 1-8; Frances A. Koestler, *The Unseen Minority: A Social History of Blindness in the United States* (New York: AFB Press, 1976), 3-11; Mark Paterson, *Seeing with the Hands: Blindness, Vision, and Touch after Descartes* (Edinburgh: Edinburgh University Press, 2016), 1-10; Aparna Nair, " 'They Shall See His Face': Blindness in British India, 1850-1950," *Medical History* 61, no. 2 (2017): 181-199.

[34] See Michel Foucault, *Madness and Civilization: A History of Insanity in the Age of Reason*, trans. Richard Howard (New York: Routledge, 1989), 3-10; Kathryn M. Burtinshaw and Dr. John Burt, *Lunatics, Imbeciles and Idiots: A History of Insanity in Nineteenth-Century Britain and Ireland* (Barnsley: Pen and Sword Books Ltd., 2017), 4-12; Catharine Coleborne, *Insanity, Identity and Empire: Immigrants and Institutional Confinement in Australia and New Zealand, 1873-1910* (Manchester: Manchester University Press, 2015), 2-8; Roy Porter, *Madness: A brief History* (New York: Oxford University Press, 2002), 3-28; Waltraud Ernst, *Mad Tales from the Raj: Colonial Psychiatry in South Asia, 1800-1858* (London: Routledge, 1991), 1-11; Debjani Das, *Houses of Madness: Insanity and Asylums of Bengal in Nineteenth-century India* (New Delhi: Oxford University Press, 2015), 3-20.

[35] See Angela Ki Che Leung, *Leprosy in China: A History* (New York: Columbia University Press, 2009), 1-5; Stephen Snelders, *Leprosy and Colonialism: Suriname under Dutch rule, 1750-1950* (Manchester: Manchester University Press, 2017), 3-14; Michelle T. Moran, *Colonizing Leprosy: Imperialism and the Politics of Public Health in the United States* (North Carolina: University of North Carolina Press, 2007), 1-13.

[36] Apalak Das, "Seeking the 'Truth' from 'Enumerating' Numbers: Leprosy in Census and Public Health Reports of Colonial Bengal: 1890s-1940s," *Indian Historical Review* 47, no. 2 (December, 2020): 223-43.

and charitable relief to 'lepers' in voluntary hospitals and leper asylums, though, in affording medical relief in such institutions, the necessity for sternly enforcing the segregation of the sexes should be always taken into account. However, this premise of GOI dealing with segregation was largely disavowed by the newspaper press. An officer wrote a note on the Secretary of State's despatch of 20th September proceeding to bring the fact to Sir C. Aitchinson's notice, but, this issue had not been discussed any further. It seems that the idea of absolute segregation against leprosy, which might be very expensive undertaking, was gaining momentum amongst the colonial officials in India. For them, the absolute segregation, which means 'the imprisonment in an asylum for life', could be the only way to stamp out the disease. In order to seclude 50,000 or 15 per cent of all the lepers in India, it would cost the Raj between 30 and 40 lakhs of rupees in a year which was prohibitive to the eyes of administration. The Chief Commissioner of the Central Provinces was of the view that every 'leper' should be detained to diminish the cause for spreading the contagion, although, there were other stakes also which had been under consideration of the GOI,[37] the principal among which was the reform in police system.

"This reform cannot be affected except at a heavy cost, and if taken up seriously will, with the other unavoidable demands, falling on the treasury, leave the Government little justification for spending much money in connection with the prevention of leprosy."[38]

The officials, with the absence of new regulations concerning the segregation, had relied on the existing Police Acts under which the exposure of loathsome diseases was punishable. They

[37] NAI, GOI, Pros. Nos. 45-48, Calcutta Records, Home Department, Medical Branch, March, 1889, subject: Legislation for the Treatment of leprosy in India; the note was related to the reply from the Chief Commissioner, Central Provinces, dated 16th October 1888, stating that the question of taking steps for segregating and treating lepers in these provinces was under the consideration of the Chief Commissioner when the resolution of the Government of India was recorded.
[38] NAI, GOI, Pros. Nos. 45-48, Calcutta Records, Home Department, Medical Branch, March, 1889.

wanted an order to be issued by the Magistrate to detain the 'lepers' in a government licensed leper asylums for a certain period. For this, legislation would have been required. Some opinions went further, emphasizing on the criminalization of the leprosy sufferers.[39] Treating the 'lepers' as criminals, who were supposed to be as 'unsafe' or 'unstable' as lunatics, was justifiable to the authority. To deal with this issue two alternatives were put forward. For secluding the 'lepers', establishing asylums by the voluntary action of private munificence and their subsequent recognition by the government under certain criteria was one of the plans. But the government would not take any financial responsibility in this respect. The second alternative had been to look for the asylums established and maintained by the Mission to Lepers. In this case, the only problem was their proselytizing nature of the operations that, as the officials thought of, might have become major hindrance for the compulsory segregation of lepers. Thus, in comparison with the second proposal, it was better to leave the issue to local bodies and governments 'to say how far in any particular case they can and will aid private institutions.'[40] B. Simpson, the Surgeon General, had expressed his opinion on legislation. For him, the fact, i.e. the disease increased largely after 1872, was based on exaggerating figures. The agencies that helped in collecting the statistics had probably included non-leprosy people in the leprosy survey which was solely devoted to obtain only the number of 'leper beggars' existing in the country. Moreover, the extension of railway communications had forced them into larger towns during the period of enumeration; hence, they were altogether brought under the survey showing the rapid increase of the disease. Simpson was skeptical about the procedure of legislation, therefore,

[39] Manmohan Krishna, "From Criminalization to Confinement: the Leprosy Sufferers of Colonial Bihar and Chotanagpur 1870s-1940s," *the Proceedings of the Indian History Congress* 73 (2012): 982-996.
[40] NAI, GOI, Pros. Nos. 45-48, Calcutta Records, Home Department, Medical Branch, March, 1889, subject: Legislation for the Treatment of leprosy in India; the notes, Dated 8th January, 1889.

he preferred other measures that would prove to be more effective to act with regard to the 'lepers' rather than simply implementing the legislations.[41]

An unofficial letter was sent to the Legislative Department, GOI stating that there had not been such a law in British India by which the 'lepers' could be removed from one place to another and also there were no legal provisions concerning the expenses of such removal. The question, raised in that letter, was who would ultimately bear the financial accountability. The problems, however, were nothing unusual as the English Poor Laws and Act XXXVI of 1858 (amended by Act XVIII of 1886) were having similar issues regarding the cost of maintenance and lodging of poor people and lunatics respectively. [42] A. L Saunders, the Under Secretary to the Chief Commissioner of the Central Provinces had sent a letter to the Secretary to the GOI on 16th October, 1888, where he proposed for a new Municipal Bill for the Central Province to deal with the leprosy population in that region.[43] Finally, on 5th March, 1889, R. W Carlyle, the Under Secretary to the GOI, in an official Memorandum, had issued an order in favor of legislation on 'lepers'. It had been decided that special law should be embarked upon to authorize the Magistrates who could issue orders:

"…for the compulsory detention in Leper Asylums and other similar institutions in the country, of all leprous vagrants or paupers who may be pronounced by duly qualified medical authority as likely to spread the disease of leprosy."[44]

[41] NAI, GOI, Pros. Nos. 45-48, Calcutta Records, Home Department, Medical Branch, March, 1889, Letter from B. Simpson, M.D, Surgeon General to the Home Department.
[42] NAI, GOI, ibid, an unofficial letter to Legislative department, dated 22nd February, 1889.
[43] NAI, GOI, ibid, No. 45, Letter from A.L Saunders to the Secretary to the GOI, dated Nagpur, 16th October, 1888.
[44] NAI, GOI, Pros. No. 48, Calcutta Records, Home Department, Medical Branch, March, 1889, subject: Legislation for the Treatment of leprosy in India. Office Memorandum by R.W Carlyle, Under Secretary to the GOI, dated, Calcutta, the 5th March, 1889.

Although, the British government was gradually concerned about the movement of 'leper' population in colonial India, still the Raj did not consider 'leprosy' or leprous bodies as imperial danger. In the same official Memorandum, the government had recommended that the Magistrates should not be empowered to send the lepers 'to any proselytizing institutions' against their will. The colonial state would not have any desire to take part in any process of proselytization directly. It seems that the government was indicating towards the 'Mission to Lepers' under which most of the asylums in India existed. This order was issued just one month before the death of Father Damien in Kalaupapa, Molokai (15th April, 1889). This incident, therefore, had changed the prior standpoint of colonial authorities regarding 'leprosy' and induced them to seriously think about the question of legislation.

After the publication of Leprosy Commission's report in 1893 regarding the condition of leprosy in British India, a Special Executive Committee was appointed by the National Leprosy Fund Committee to review the proposals given to the GOI planning to initiate comprehensive investigation on leprosy and leprosy sufferers.[45] On 15th September, 1893, the Secretary to the Home Department of GOI, C. J Lyall had sent a letter to the Secretary of the Municipal (medical) Department to the Government of Bengal (GOB), accompanying with the two memorandums; one was from W. R Rice, Surgeon General with the GOI and the second one from the Special and Executive Committees on the Report of the Leprosy Commission.[46] These memorandums clearly showed that neither the Special Committee nor the Surgeon General did comply with all the suggestions of Commission. Moreover, the Committee, in its memorandum,

[45] West Bengal State Archive (hereafter WBSA), Government of Bengal (hereafter GOB), File no. 3L/4/1, Financial Department, Medical Branch, Letter from C. J Lyall, secretary to the GOI, Home department to the Secretary to the GOB, Municipal (Medical department), Pros. Nos. 10-11, 15th September 1893, september,1893.
[46] WBSA, GOB, File no. 3L/4/1, Financial Department, Medical Branch, year 1893.

criticized the way in which the Commission came to the conclusions about the issue of segregation. The Commission in one of the sections in the report named '*practical suggestions*'[47] had strongly discarded the necessity of compulsory segregation.

"No legislation is called for on the lines either of segregation or of interdiction of marriages with lepers".[48]

Even the Commission went on to say that in India complete or partial compulsory segregation might be considered 'absolutely impracticable'. Thus, to the Commission, there should not be any 'Imperial Act' directed to the lepers. However, the Special and Executive Committee expressed their contentions against these proposals; the Committee offered to the GOI and indirectly advised the British colonial authority not to rely on such suggestions.

"Your Committee having already expressed their inability to accept the reasoning, upon which the Commissioners have based the above conclusions, are equally unable to accept the corollary that the segregation in any case of leprosy in India is either impracticable or undesirable."[49]

While repudiating the view of Leprosy Commission about the segregation of leprosy sufferers, the members of the Special Committee put the ideas of Dr. Vandyke Carter, an IMS officer presenting a model of confinement which was, surely, more worthwhile and inclusive to them. For Carter, leprosy could be checked by erecting asylums at certain centers associated with a detention site under the due management and supervisions- colonies or village communities of leprosy affected people- while isolating the sufferers and carrying out proper legislations so that

[47] See *Leprosy in India: Report of the Leprosy Commission in India, 1890–91*, 452-57.
[48] ibid, 258.
[49] WBSA, GOB, File no. 3L/4/1, Financial Department, Medical Branch, Pros. Nos. 10-11, May, 1893, *The Memorandum on the Report of the Leprosy Commissioners, as prepared by a Special Committee, appointed for the purpose, and endorsed and annotated by Members of the Executive Committee*, 1st May, 1893.

pauper lepers would have been taken into the asylums.[50] Nonetheless, Carter was also in favor of using the means of state power whenever it was needed.

"…Legislative authority is needed to take up the vagrant sick, to remove the sorely diseased … at times to enforce continued isolation of the infected until medical sanction of liberty be granted."[51]

In a similar way, W. R Rice had considered leprosy as a loathsome disease and those suffering from this malady should be segregated from the general public. [52] For this reason, the municipalities and local committees were to be empowered to enact by-laws for the 'lepers'. Some of the members of the Special Committee, though, individually defied these propositions altogether, were giving approval to the recommendations of Commission in saying that 'the spread of leprosy by contagion is not sufficient to justify the compulsory segregation of lepers';[53] interestingly out of five dissent members, Andrew Clark, James Paget, J. Fayrer, and W. Guyer Hunter were from the Executive Committee and only Jonathan Hutchinson was the nominee of the Royal College of Surgeons. The report had succeeded in creating a tremor in the contemporary leprosy investigations to such an extent that *British Medical Journal* acclaimed it as 'one of the landmarks in the history of leprosy' and medical developments. But the imperial fear of contagion, degeneration of superior races, and other political factors in the late Victorian period seemed to have influenced the medical world so much that the idea of segregation was finally endorsed by the First International Leprosy Congress at Berlin (1897) concluding that

[50] WBSA, GOB, File no. 3L/4/1, Financial Department, Medical Branch, ibid.
[51] ibid.
[52] WBSA, GOB, File no. 3L/4/1, Financial Department, Medical Branch, Pros. Nos. 10-11, August, 1893, the Letter '*Measures suggested in regard to the treatment of Lepers'* from W.R Rice, Surgeon-General, to the GOI, 16th August, 1893.
[53] Kakar, "Leprosy in British India, 1860-1940: Colonial Politics and Missionary Medicine," 219-220.

'every leper is a danger to his surroundings'. This was again ratified in the Second International Leprosy Congress held in Bergen (1909).[54] From the beginning, the Leprosy Commission had failed to explain the meaning of 'segregation' in its report, where, on the one hand it put forward the objections relating to compulsory or partial confinement. On the other hand, it encouraged the empowerment of municipalities to make 'by-laws', with which the trading or vending of articles and foodstuff by 'lepers' could easily be prohibited. It implies that the Commission was not be able to grasp the problem of defining the word 'segregation'.

On 31st October, 1893, the Municipal (Medical) Department of GOB had adopted a resolution, signed by N. Bonham Carter, the then Under Secretary of GOB, where the recommendations of Commission were being acknowledged as the ultimate solution of 'leper problem' in the metropolitan cities and municipalities, keeping the rural areas out of this discussion.[55] But not all colonial officials were willing to give consent to the proposals. T. T Allen, the Superintendent and Remembrancer of Legal Affairs, had sent a letter to the Secretary of GOB, Municipal Department, in which he voiced in favor of segregation, especially, in the city like Calcutta where the large number of 'lepers' are said to resort. [56] Even, the Police Commissioner of Calcutta, Sir John Lambert, and the Chairman of Calcutta Corporation, J. G Ritchie echoed the opinion made by Allen.[57] Therefore, a draft bill to '*provide for the segregation of pauper lepers and the control of lepers exercising certain trades*' or '*the Bengal Lepers Act of 1895'* was

[54] Kakar, "Leprosy in British India," 219-220.
[55] WBSA, GOB, File no. 3L/4/2, Financial Department, Medical Branch, Pros. No.12, October, 1893, the Resolution adopted By the GOB, Municipal (Medical) department, 31st October, 1893.
[56] WBSA, GOB, File no. 3L/4/1, Financial Department, Medical Branch, Pros. No. 15, the Letter from T.T Allen to the Secretary to the GOB, Municipal department, 20th December 1893, December, 1893.
[57] WBSA, GOB, File no. 3L/4/6, Financial Department, Medical Branch, Pros. No. 16, January, 1894, the letter from John Lambert to the Secretary to the GOB, Municipal department, 25th January 1894; WBSA, GOB, File no. 3L/4/7, Financial Department, Medical Branch, Pros. Nos. 17-18, 585, January, 1894, the letter from J.G Ritchie to the Secretary to the GOB, Municipal department, 26th January, 1894.

drawn up under the instructions of Lieutenant Governor of Bengal and after obtaining general consent of The Governor General in Council. Now, GOB and GOI carefully designed legislation, after the proposals of Commission that distinguished 'pauper lepers' from leprosy sufferers in general. [58] Still, the colonial government was suffering from indecisions pertaining to the question of leprosy population. H. H Risley, the Secretary to the GOB, on behalf of Lieutenant Governor of Bengal, stated in the resolution adopted in 1895, that the Governor General was unable to accept the complete segregation of 'lepers':

"The Governor General in council was of opinion that the absolute segregation of sexes and the confinement for life of all affected by leprosy,…was the only effectual measure for stamping out the disease, would not only be repugnant to public opinion, but would be impracticable in India."[59]

In spite of such declaration, the GOI might not turn a blind eye to the imperial directives as well as the consensus springing up from Indian elites, precisely from the *Parsis* in Bombay, which played a decisive role in making of the Lepers Act 1898, No. III. It became one of the major regulations, replacing the Bengal Lepers Act of 1895, on leprosy in the colonial India where segregation and medical treatment of 'pauper lepers' were ensured. It incorporated the line, i.e. "any person suffering from any variety of leprosy in whom the process of ulceration has commenced".[60] As far as the definition of 'pauper leper' was concerned, this act defined them as the people 'who publicly solicits alms or express or exhibits any sores, wounds, bodily ailment

[58] WBSA, GOB, *A Draft Bill to provide for the segregation of pauper lepers and the control of lepers exercising certain trades' or 'the Bengal Lepers Act of 1895'*.
[59] WBSA, GOB, File No. 3L/4/16, Financial Department, Medical Branch, Pros. No. 30, March, 1895, the Extract from the Proceedings of GOI, in the Home (Medical) department, 23rd March, 1895.
[60] Kakar, "Leprosy in British India," 221; the words "in whom the process of ulceration has commenced" replaced later.

or deformity with the object of exciting charity or of obtaining alms or who is at large without any ostensible means of subsistence.'[61] The provincial governments had been empowered with several powers including the appointment of anyone as medical officer of the government or any sort of eligible or licensed medical professional to be an 'Inspector of Lepers' and establishment of leper asylum in any place by notification. Moreover, in this Act, the health officers or inspectors were given immense power to arrest the person alleged to be 'leper' and the police officers could take an action without a warrant against anyone. Mostly, the aforesaid section was directed to 'pauper lepers'.[62] The police officer, as per law, should send the person to the nearest convenient police station without delay and he must be taken before an 'Inspector of Lepers'. If he found that the alleged person was a 'leper', then a certificate in form B had to be issued whereupon the 'leper' should be presented before a Magistrate. [63] Though, there were such provisions to discharge the leprosy affected people, if not 'pauper lepers', the provincial government might order that no 'leper' should any specified area:

"personally prepare for sale or sell any article of food or drink or any drugs or clothing intended for human use or bathe, wash cloths or take water from any public well or tank debarred by any municipal or local bye-law from use by 'lepers' or drive, conduct or ride in any public carriage plying for hire other than a railway carriage or exercise any trade or calling which may be such notification be prohibited to lepers."[64]

[61] See *The Lepers Act of 1898, or Act no. III of 1898,* (Calcutta: Government of India Press, 4th February, 1898), 1-8.
[62] *ibid*, 1-8.
[63] See *the Unrepealed Central Acts, Vol. IV, from 1898 to 1907* (Simla: Government of India Press, 1938), 1-4.
[64] See *the Unrepealed Central Acts, Vol. IV, from 1898 to 1907* (Simla: Government of India Press, 1938), 1-8.

The Empire, with this enactment, thought of preventing 'lepers', who were suffering from this contagious disease, from 'annoying' the public in British Raj within the notified localities.[65] Hence, it is unthinkable that this discriminatory law had not been repealed till the passing of 'Repealing and Amending Act, 2016' through which this colonial shackle has finally been removed. Sanjiv Kakar has made an important observation that regional pressures induced solutions which did not always correspond to the official dictum. From 1882 onwards, the European and some of the Indian elites in Bombay insisted Bombay government to amend the policies relating to segregations of 'lepers'. The influence of pro-segregation figures, like Dr. Henry Vandyke Carter and the continued appeal from *Parsis* compelled the Bombay government to modify the municipal by-laws and declare leprosy 'to be an infectious disease dangerous to life'.[66] The Lepers Act of 1898 was put into effect immediately in Burma, except the Shan states (a state of Myanmar), and in the districts of Allahabad, Banaras, Lucknow, and Kumaon divisions of the North Western Provinces followed by Port Blair in the Andaman Islands in 1900. This Act was applied in Assam in 1901, in some districts of the Central Provinces in 1903, in Dehra Dun and Kanpur districts of the United Provinces respectively in 1906 and 1909. After a prolonged and rigorous discussion, the Act was enforced in the entire Madras presidency in 1913.[67] This was applicable mainly to the leper asylums; in case of Bombay, the Act was not introduced until 1911.[68]

[65] Sir Courtney Ilbert, "Review of the Legislation of the British Empire for 1898," *Journal of the Society of Comparative Legislation*, no. 3 (1899): 465.
[66]Kakar, "Leprosy in British India," 220.
[67] Buckingham, *Leprosy in Colonial South India*, 185.
[68] Kakar, "Leprosy in British India," 221.

The Lepers Act of 1898 in Colonial Bengal: Extension and Appropriation

The Lepers Act of 1898, gradually, was brought or applied in other provinces, though, the 'lepers' of the Native States were meant to be excluded from this enactment till 1903. The Assistant Secretary to the GOI, Foreign Department, E. V Gabriel had requested the Lieutenant Governor of Bengal to present the point of view about the new alteration to the existing Lepers Act, 1898**.** However, it had been advised to supplant the section 19 of the Lepers Act, 1898 with minor changes in a way that the objective to control the 'lepers' remained irrevocable**.** Finally, the section was annulled by the Repealing and Amending Act, 1903, while introducing a new section 'to provide the segregation and medical treatment, in asylums in British India, of any leper or class of lepers from the territories of any Native Prince or State in India.'[69] This was required, for obvious reason, to make legal the preparations already in force in order to receive 'lepers' from the Native States**.** The Raj appeared to be much indulgent, depending on the planning that resulted in the implementation of foreign jurisdiction counting the issue of the imbursement, for its [the Amendment Bill] function**.** In this regard, what the colonial government had proposed might be the only credible solution to the regional authorities**.** It brought the Durbars in this affair; the colonial state expected Durbar to shell the charge of 'legal' caring for the 'lepers' in the asylums of Raj as it did in case of prisoners or convicts who were from the Native States and kept in custody in the jails of British India**.** Mr. Gabriel sought a kind of immediate riposte, taking the matter into serious consideration, from the Lieutenant Governor of Bengal to push the Bill for the act during the Simla session**.** Thus, the Act came to be viewed as

[69] WBSA, GOB, File no. 3L/12, Municipal Department, Medical Branch, Pros. Nos. 1-3, letter from E.V Gabriel to the Chief Secretary to the Government of Bengal, dated Simla, 8th May, 1903, Calcutta, June, 1903, Subject Amendment of the Lepers Act, 1898.

the Lepers (Amendment) Act, 1903 wherein the altered section 19 was to be roped in, leaving the previous one out:[70]

"The Governor General in Council may, by notification in the 'Gazette of India', direct that any leper or class of lepers, with respect to whom an order for segregation and medical treatment has been made by a Magistrate having jurisdiction within the territories of any Native Prince or State in India, may be sent to any leper asylum specified in such order; and thereupon the provisions of this Act and of any rules made there under shall, with such modification not affecting the substance as may be reasonable and necessary to adapt them to the subject matter, apply to any leper sent to a leper asylum in pursuance of any notifications as though he had been sent by the order of a Magistrate having jurisdiction under this Act."[71]

On 3rd June, 1903, on behalf of the Lieutenant Governor of Bengal, the Officiating Secretary to the GOB, Municipal Department, L. P Shirres replied that there was no objection to the proposal.[72] A few districts of Bengal, formerly believed as less endemic areas, such as Nadia, were shown as having high incidence of leprosy in the census of 1901. It caused problem to the administration. The Magistrate of Nadia confirmed a hazardous case of 'leper', trading tobacco, fruits, etc. inside the Krishnanagar Municipality**;** although, he was unable to assign any 'Inspectors of Lepers' in the district since there was no appropriate mechanism to contend with the case under the section 9 (1) of the Lepers Act. This persuaded, the Commissioner of the

[70] In this newly added section no. 19, the following phrases, which had been in previous section no. 19, were replaced: "**Provincial Government**" rep. by "**the Governor General in Council**", "**Official Gazette**" rep. by "**Gazette of India**", "**any Indian State**" rep. by "**the territories of any Native Prince or State in India"** and " **in the Province**" was entirely replaced. See *the Lepers Act of 1898* and *the Lepers (Amendment) Act, 1903*.

[71] WBSA, GOB, File no. 3L/12, Municipal Department, Medical Branch, Pros. Nos. 1-3, the Bill concerning the Lepers (Amendment) Act, 1903.

[72] WBSA, GOB, File no. 3L/12, Municipal Department, Medical Branch, Pros No. 3, letter from L.P Shirres to the Secretary to the GOI, Foreign Department, dated Darjeeling, the 3rd June 1903.

Presidency Division, E.W Collin to exchange a few words with the Secretary to the GOB, Municipal Department concerning the difficulties that the colonial administration was experiencing to restrain the activities of the pauper 'lepers' in Nadia**.** Collin had also expounded the Magistrate's proposal, extending the Lepers Act, especially section (8) and (9) to the Krishnanagar Municipality and, if necessary, the 'lepers' of Nadia might be sent off under section (3) to either Calcutta or Purulia asylums. The administration accorded with the plea**.** J.C.K Peterson, the Under Secretary to the GOB, Municipal Department, on 20th June 1907, had remitted the approval to the Commissioner, placing the Krishnanagar Municipality under the domain of the Lepers Act with aforesaid sections, and instructed the administration that, hereafter, the 'lepers' would be sent to Gobra, Calcutta, i.e. the Prince Albert Victor Leper Asylum.[73] Practically, the Act was extended to each municipality in Southern Bengal, within a year, containing Krishnanagar, Howrah, Fort William, Maniktala, Cossipore – Chitpur, South Suburban, Calcutta, Tollygunge, and Garden Reach Municipalities on the one hand and Birbhum, Burdwan, Manbhum districts on the other.[74]

Exploring the stipulation of colonized society and the ways leprosy patients were treated in colonial Orissa**,** Biswamoy Pati and Chandi P. Nanda rightly have argued that the imperial raison d'être of segregation, which have had a 'class offensive' nature and directed towards the indigent leprosy sufferers, had ultimately outlined the colonial policy on leprosy**.** To the colonial administration of Puri**,** the 'lepers', appearing nearby of temples and shrines, were seemed to be a peril**.** This unease reflected in the statement of a Civil Surgeon who took a racist outlook and

[73] WBSA, GOB, File no. 3L/20, Municipal Department, Medical Branch, Pros. Nos. 13-17, Proceedings of the Lieutenant Governor of Bengal, June 1907, Extension of the Leper Act to the Krishnanagar Municipality.
[74] WBSA, GOB, File no. 3L/16, Municipal Department, Medical Branch, Pros. No. 31, February 1908, Notification related to the extension of the Lepers Act of 1898.

opined that leprosy patients should not be permitted at any cost to enter the hospital**.** To that Surgeon**,** 'the lower classes [of] Uriyas are dirty race and have no ideas of cleanliness and sanitation.'[75] The GOB got the proposal from the Commissioner of the Orissa Division, in 1908, to put Sambalpur district under the Lepers Act of 1898:

"lepers are a menace to the people amongst whom they live and it is impossible to ensure that they will do nothing to endanger the health of others".[76]

The Deputy Commissioner, Mr. Moberly, had seconded the view and appealed for slotting Sambalpur into the Act. For the sake of protecting the health of general population and referring to the Civil Surgeon's observation, Moberly also explicated the importance of 'leper' laws for the leprosy sufferers, straying on the Raipur-Sambalpur road**.** Yet, the Lieutenant Governor had neither been disposed nor convinced to take Sambalpur district into account. Relying on the report of the last census where the numbers of leprosy sufferers in Sambalpur were shown just 67, he clarified that there was no justification to extend the Act to that district as the other districts of Orissa had already received more 'lepers' than Sambalpur. If ever it required, i.e. to extend the Act, the worst affected districts should be prioritized, though, the existing asylums in Orissa did not have adequate infrastructure to accommodate all the 'lepers', making the government unable to cogitate about the extension of the Act at present.[77] [78]

[75] Biswamoy Pati and Chandi P. Nanda, "The leprosy patient and society: Colonial Orissa, 1870s-1940s," in *the Social History of Health and Medicine in Colonial India*, eds. Biswamoy Pati and Mark Harrison (New York: Routledge, 2009), 115.
[76] Pati and Chanda, "The leprosy patient and society," 119.
[77] WBSA, GOB, File no. 3L/21, Municipal Department, Medical Branch, Pros. Nos. B 17 to 19, dated 1st July 1908, Tabular Statement.
[78] Das, "Seeking the 'Truth' from 'Enumerating' Numbers: Leprosy in Census and Public Health Reports of Colonial Bengal: 1890s-1940s," 230-32.

Number of 'lepers', found in the mountainous and hilly terrains, had been relocated to mainly Sylhet asylum or any other institutions, if needed**.** In Darjeeling, the appointed Deputy Commissioner, J.T Rankin had sent a petition to the Commissioner of Rajshahi Division about the removal of wondering 'lepers' from Darjeeling**.** The three leprosy sufferers in that region, as Rankin thought, were supposed to be principal source of contagion and considered 'great danger' to the local public health. The Municipal Commissioner was much fretful to clear these 'lepers' out of the town who were strolling around**.** In due course the Under-Secretary to the GOB, Financial Department, E. N Blandy finally gave assent to this request on 10th October, 1914 and approved the extension of the Lepers Act, 1898 including sections (3), (4), and (15) to the Municipality of Darjeeling.[79] Similarly, on 5th April, 1918, the GOB had also put the Kurseong Municipality under the Act and heeded to the appeal of the Municipality about taking the expenses on sending any 'leper' from the Kurseong to the Gobra Leper Asylum, Calcutta.[80] Thence, the Lepers Act, after its amendment in 1920, was applied to the entire British India, together with the Santal Pargana, Spiti, and British Baluchistan, however, the substance or spirit of the Act stayed unchanged.[81] Concurrently, public health, the sanitary and medical concerns, such as issues related to dispensaries, the Pasteur Institute, sanatoria (mainly the tuberculosis centers), leper and lunatic asylums, and hospitals, were assigned as the provincial subjects in the Montagu-Chelmsford Reform of 1919. Under the ascendant and concomitant power of legislation, the GOI could ratify or introduce regulations, if several provinces got affected by certain epidemic or disease; though, the lawmaking power still remained within the competence

[79] WBSA, GOB, File no. 3L/14, Financial Department, Medical Branch, Pros. Nos. 7-11, November, 1914, Proceedings of the GOB, Albert Victor Asylum for Lepers Act Gobra appointed as the asylum for the reception of Lepers from the Darjeeling Municipality.

[80] WBSA, GOB, File no. 3L/9, Financial Department, Medical Branch, Pros. Nos. 14-18, April, 1918, Proceedings of the Government of Bengal, Extension of the Application of Sections 3, 4, and 15 o the Lepers Act of 1898 to the Municipal area of Kurseong.

[81] Frank Oldrieve, *India's Lepers: How to rid India of Leprosy* (London: Marshall Brothers Limited, 1924), 130.

of the provincial administration.[82] It shows that the sanitary and public health had turned into local subjects that frequently called for the directives from the GOI.

Since 1908, the Mission to Lepers had urged to redefine the term 'leper'. The definition was found problematic when the Superintendents of Leper Asylums met at the Conference, held at Purulia, and they discussed about the probable modification of the term. Later, two consecutive Conferences, the first was convened in 1911 at Chandkuri followed by the second in 1913 at Raniganj, had espoused a sort of resolution [particularly the Raniganj Sectional Conference was much more ardent to modify the definition of 'leper'] and requested the government to dwell on about employing the word 'leper' in the Lepers Act. Nevertheless, in some way this proposal was not approved by the GOI.[83] Frank Oldrieve had presented a paper, entitled '*Legislation Providing for the Care and Control of Lepers*', in the Conference of Leper Asylum Superintendents at Calcutta in 1920 wherein he discussed about the importance of the Lepers Act and its functionalities in colonial India**.** To Oldrieve, this Act had been mostly redundant in the areas where it was put into practice earlier**.** The police officials, who were authorized to produce the 'pauper or beggar lepers' in front of magistrate, were not willing to apprehend and detain the leprosy cases. There might be no such regulation assumed by the asylum managements to retain the 'lepers' inside the confinements; some officers were of the opinion that their attempt to send them into the asylums was mostly ineffectual due to this reason. Furthermore, other works were preferred more than taking 'lepers' into custody.[84] Despite this reluctance, almost 718 pauper

[82] NAI, IOR MSS EUR F 116/105, Butler Collection, Acc No. 3844, subject Indian Reforms: Report on Indian Constitutional Reform.
[83] See *Report of a Conference of Leper Asylum Superintendents and others on the Leper Problem in India* (Cuttack: the Orissa Mission Press, 1920), 60-73; the paper named 'Legislation Providing for the Care and Control of Lepers' which was presented by Frank Oldrieve in the conference organized by Mission to Lepers and held between 3rd to 6th February, 1920 in Town Hall, Calcutta.
[84] Oldreive, 'Legislation Providing for the Care and Control of Lepers,' ibid, 60-73.

'lepers' had been put into the asylums in Calcutta, amongst them 468 sufferers, after having adequate treatment were permitted to leave. In his letter, the Deputy Commissioner of Calcutta said:

"I am of opinion that the majority of the cases (of admission) are re-admissions, being admitted and discharged on the breaking out and healing of their ulcers as the case may be."[85]

Therefore, the Oldrieve had proposed to supplant the phrase written in Section 2 (1), i.e. "In whom the Process of ulceration has commenced", with "Leper means any person suffering from any variety of leprosy". The British Raj had perceived the Lepers Act of 1898 as essential means to be carried out over the indigent *diseased*; hereafter, the 'lepers' could be easily transported to the government asylums**,** although the problem resided elsewhere**.** The number of government asylums in Bengal was much less [only three] where the administration could simply accommodate the 'lepers', while most of the asylums were either under the management of Mission to Lepers or any other voluntary organizations. Yet, the Raj was doubtful about the ways the Missionaries operated such voluntary asylums**.** Thus, to contend with the problem of housing these 'disabled' in India, Oldrieve pressed for the collaboration or politico-legal alliance between the government and the Mission to Lepers. His suggestion had received the support of medical stalwarts such as, Sir Leonard Rogers[86] who repeatedly insisted to redefine the term 'leper' in the Lepers Act and sought to adopt a resolution unanimously**,** which had been formerly proposed to the GOI by the Mission to Lepers. To him:

[85] ibid, 61.
[86] Sir Leonard Rogers (18th January, 1868-16th September, 1962) was the pioneer in tropical medicine. He was also a founder member of the Royal Society of Tropical Medicine and Hygiene (RSTMH) and became the President from 1933 to 1935.

"..it will undoubtedly strengthen the hands of the GOI in getting this measure carried. We are all agreed that the disease is contagious and the only way we can lessen it is to have greater powers of detaining lepers in asylum. That will be accomplished by omitting that absurd phrase about ulceration."[87]

The 'leper', it appears, had become an issue of dispute to the colonial medical academia. To strengthen the legislative apparatuses of the GOI, the medical world required a meticulous evaluation on the usage of 'lepers' before putting the sufferers into the asylums. A general concord in favor of the amendment of the Lepers Act had also induced the legal cliques to contemplate about the 'lepers' who were from the affluent families. *Swasthya Samacar*, one of the contemporary leading Bengali periodicals on public health, had published an editorial regarding the execution of the Lepers Act, 1898**.** An appeal was moved, through this periodical, to the government for reconsidering the leprosy patients mercifully.[88] Specially, it advocated for those belonging to the reputed families. They must have been taken care of in a way that there would be little objection made by their relatives. The *Samacar* had demanded for a new Lepers Act while altering the previous one:

"On 11th March, Sir William Vincent had presented a legal draft to amend the existing 1890s Lepers Act in the Indian Legislative Assembly. The aim of the amendment is to thwart the spread of leprosy in India. Therefore, each leprosy patient should be segregated to achieve this objective. But, at present, the existing Lepers Act could only segregate the vagrant lepers.

[87] Oldreive, 'Legislation Providing for the Care and Control of Lepers,' 75.
[88] Bangiya Sahitya Parishad, Kolkata (hereafter BSP), *Swasthya Samacar, 9th year, issue 1, Baisakh, 1327 (i.e. Bengali Year),* 20.

According to the physicians, leprosy is contagious in every form. For this reason, new legal enactment, for both rich and poor, is in making to segregate each leprosy patient."[89]

Ultimately, the definition was revised in the Lepers (Amended) Act, 1920, by means of integrating the axiom in the section 2(1), i.e. ''Leper' means any person suffering from any variety of leprosy'. As far as the 'pauper lepers' were concerned, the specifications had been elucidated in the section 2(2) of this Act in detail.[90] Though, the British Raj was much worried as regards to the movement of the 'beggar and pauper lepers', proved to be 'nuisance' not only to the state, but to the society as well, the legal machineries in colonial India had to outline the by-laws keeping the 'diseased bodies' in mind overall and classify the procedures to deal with the 'lepers'.

The Comedy of (Medical) Error: Individual and the Colonial State

An intriguing episode is revealed through the archival studies, precisely it is found in the letters of the Office of the Military Secretary**.** This is a case of someone called Babu R.K Chatterjee, which seems to be interesting indeed, dealing with his *alleged* leprosy symptom and the medico-legal problem associated with it. Leonard Cotterill, the Surgeon to His Excellency, had confirmed in a letter, on 4th September, 1916, that one of the members of staff in the Office of the Military Secretary, R. K Chatterjee also known as Babu Rajani Kanta Chatterjee, was supposed to be leprosy sufferer. The administration sought to ensure whether Chatterjee was bearing this disease, but he rebuffed the request every time whenever he had been asked to undertake definite medical tests**.** In this circumstance, the Office of the Military Secretary was

[89] BSP, *Swasthya Samacar, 9th year, issue 1,* ibid, 20.
[90] See *section 2 (1) and 2(2) of the Lepers (Amended) Act, 1920.*

recommended by Cotterill to withhold his service for an indefinite period.[91] R. Verney, the Lieutenant Colonel, had directed Chatterjee, as per the suggestion of Surgeon to His Excellency, to resign from his post with 'invalid pension'. The response was nonetheless quick and out of the ordinary. In his letter to the Military Secretary, on 18th September, 1916**,** Chatterjee had defended his position. Feeling like a cat on a hot tin roof, he was scared of undergoing such medical scrutiny as he always detested any bacteriological examination, meddling with the 'flesh of a body'. Adding to this, there was a strong religious opposition to get scuffed on the body in September.[92] For the Raj, it was not unusual to stumble upon such objections presented by the indigenous population before going through numerous health examinations in fairs, *melas*, or vaccination drives;[93] however**,** when an employee had been standing by his submission, it was truly an exceptional instance of 'counter-medical narrative'. The Office of the Military Secretary earlier had provided an alternative to Chatterjee, which seemed to be 'extreme penalty' to him, conferred on any government employee in this situation. A few years back, he was tarnished because of applying for transfer to Bengal and had still not been able to recuperate from that financial loss.[94]

"I should only say that such a penalty will entail incalculable hardship upon me a poor man with a large number of dependants, viz., wife and a son aged 12 years, an unmarried niece aged 7 years and 4 nephews 12 to 17 years of age and their widowed mother who have all been my

[91] NAI, GOI, Pros. No. 43, Home Department, Public Branch, January 1918, Case of Babu R.K Chatterjee (of the Office of the Military Secretary) who is suspected of leprosy.
[92] ibid.
[93] Sanjoy Bhattacharya, Mark Harrison, and Michael Worboys, *Fractured States: Smallpox, Public Health and Vaccination Policy in British India, 1800-1947* (New Delhi: Orient Longman, 2005), 88-89; Shamshad Khan, "Colonial Medicine and Elite Nationalist Responses in India: Conformity and Contradictions," in *Contesting Colonial Authority: Medicine and Indigenous Responses in Nineteenth-and Twentieth-Century India*, ed. Poonam Bala (New York: Lexington Books, 2012), 74-75.
[94] See Pros. No. 43, Home Department, Public Branch, January 1918.

dependants since my brother's death and also an adult daughter who is entirely dependant upon me or 9 souls altogether including myself, with ever increasing demands upon my purse. I am the only breadwinner in my family and it is no exaggeration to say that the pittance which is being proposed for me being necessary very small will be hardly adequate to keep our bodies and souls together."[95]

Thus, Chatterjee continued to plea to the Office for reviewing their decision and allowing him leave for 15 months, with the intention that he might be able to find other therapies for 'leprosy', if he was infected by any means. The problem was getting more deepened when no 'lepra' bacilli had been detected from his nasal droplets and blood by the bacteriological expert of the Kasauli Research Institute nor was he declared as healthy. Seeing this trouble**,** he desired to be treated by a 'good *kaviraj*' at Calcutta.[96] Meanwhile, Chatterjee had referred the terms and conditions of the Civil Service Regulations, stating that if a government employee was found medically frail, he should be permitted to take leave for the medical treatment and to procure the official undertaking or certification from a proficient, preferably government, medical person. Leonard Cotterill had expressed his apprehension about the 'sensitivity' of this case to J. Cunningham of Kasauli Central Research Institute, as the accused was working in the Viceroy's Staff Office; Therefore, on the suggestion of the Lt. Col., Surgeon to His Excellency, H. Austen Smith, the Military Secretary finally sent him off to the Calcutta Medical College and hospital with an instruction to report as soon as possible to the Principal of the College on his appearance. The Principal, Col. J. T Calvert[97] had encountered with Chatterjee on 23rd October, 1916, and advised

[95] See Pros. No. 43, Home Department, Public Branch, January 1918.
[96] ibid.
[97] Colonel J. T Calvert had been in the headlines after the Case of Kumar of Bhawal. He was one of the physicians treating the Second Kumar of Bhawal who died of biliary colic; Partha Chatterjee, *A Princely Imposter? The Strange and Universal History of the Kumar of Bhawal* (Princeton: Princeton University Press, 2002), 192.

him to stay in the hospital for the treatment, but he refused to settle in there.[98] Being completely uninformed about the prior medical history of Chatterjee, Sir Leonard Rogers was annoyed from the very first meeting, as the official correspondences related to Chatterjee's medical condition reached later to Rogers. He then examined the patient at the pathological laboratory of the Medical College and was totally disgusted with him. The reason of his resentment was that Chatterjee had been unable to say what compelled him to visit the Medical College. In contrast, Rogers appeared to be much engrossed with the other works and microscopic examinations, preventing him to take any interest in the case of Chatterjee; although, he was administered an injection and instructed to remain under the protracted medical diagnosis which was at present not unfeasible for Rogers to perform. He wrote:

"On his return I told him that I could not carry out the prolonged treatment which might be necessary without first doing a microscopical examination of a small portion of the affected tissue, but he refused to allow this and went away and I have not seen him since. I understand he also refused to stay in hospital and he appears to be an impossible man to do anything for."[99]

Col. J. T Calvert, also considering Chatterjee as 'intractable' guy who surely had a questionable frame of mind, received this message from Rogers. It seems that the individual, alleged to get contracted leprosy, always endeavored to avoid the medical examinations**.** This fear of 'stigma', for which the 'diseased' might lose his job**,** resulted in socio-legal embargo during the Raj, passing on the consternation about the 'leprous' figures into the postcolonial society with similar intensity. After obtaining the initial report, the Military Secretary to His Excellency had arranged another meeting for Chatterjee in cooperation with the Surgeon General to the GOB. On 28th

[98] See Pros. No. 43, Home Department, Public Branch, January 1918.
[99] ibid.

September, 1917, the Surgeon General received a letter from the Military Secretary informing him that Chatterjee's extended six months leave till 13th October was about to end. Thence, the Military Secretary had requested to constitute a medical board which would examine the existing state of R. K Chatterjee's health. On 5th November, 1917, at last, the medical board declared him fit for service. This issue, undoubtedly, created an environment of confusion amongst the medical personals. The way, the colonial state hyperbolized the case, had shrouded the legal system with the idea of degeneration. Babu Rajani Kanta Chatterjee's case had been a stupefying incident to the colonial legal forums; it facilitated the need of an institution where a proper organizational research on the tropical diseases along with leprosy would be carried out. The Raj found an institution structured after the London or Liverpool School of Tropical Medicine.[100]

The 'Lepers' under Colonial Gaze: Analyzing the Regional Acts in Colonial Bengal from 1920s - 1940s

Resilient colonial surveillance over the 'infected bodies' had been gradually intensified. Issue like segregation of married lepers was of main concern to the asylum managements from the very beginning. In a letter of the Secretary of State, dated the 13th May, 1910, the issue related to married 'lepers', inter marriage of lepers or the segregation of the children of leprous patients, which was hitherto unaddressed, had been raised. The Secretary of State, Viscount Morley of Blackburn, intended to know whether there was any legislation concerning the marriage of 'lepers' or the segregation of the children enforced in the British India, as the Lepers Act of 1898 only dealt with the segregation and medical treatment of the pauper lepers and the control of lepers following certain callings. But this was not entirely true as far as some of the leper asylums in colonial India were concerned. At Purulia, the leper asylum had been governed by the

[100] See the *Annual Reports of Liverpool School of Tropical Medicine (LSTM) and London School of Tropical Medicine (LSHTM) from 1899-1920.*

'Mission to Lepers in India and the East' and subsidized by the government where a colony was completely segregated from the proper asylum. That colony, provided with housing and education, was meant for 'uncontaminated children' of leprous parents.[101] Some of the leper asylums, especially the institutions under the Mission to Lepers, followed the similar procedure of confining the *germed* entities and protecting the 'purity' of the bodies from the infliction. This, of course, allowed the colonial authorities to implement such policies in other leprosy institutions. While preparing the laws concerning leprosy prevention, the legal bodies intended to add the preemptive measures against the 'leprous bodies' in the Municipal Acts of colonial Bengal. For example, the section (431) to (447) of the Calcutta Municipal Act, 1923 entirely devoted to the prevention of infectious diseases amongst which leprosy was one of them. If any medical practitioner, as per the Act, became aware of the presence of any dangerous disease (including leprosy) in any private or public space, other than a hospital, should inform the Health Officer without delay. Moreover, the municipal authority had given immense power to the Health Officer or any other municipal officer authorized by him who might inspect any place where any dangerous disease was suspected to exist without giving notice and took such measures as he might think appropriate to prevent the spread of the said disease beyond such place. [102] On the other hand under section (376) of the Bengal Municipal Act, 1932, if the Commissioners had reason to believe that any sort of infectious disease had appeared or was likely to appear as epidemic within the municipality, they should immediately probe into the

[101] NAI, GOI, Pros. Nos. 49-50, Simla Records, Home Department, Medical Branch, part A, July 1910, Measures adopted in India as regards married lepers, inter marriage of lepers or the removal and segregation of the children of leprous parents.
[102] See *section 435 and 436, The Calcutta Municipal Act, 1923, Bengal Act III of 1923,* Legislative Department, Government of Bengal.

matter securing the 'isolation of infected'. There were other regulations also associated with this section:

"give public notice of infected places by placard on the premises and otherwise, if necessary, promptly notify head teachers of schools concerning families any of the members of which are suffering from dangerous diseases; supervise funerals of persons dead from such diseases, disinfect rooms, clothing and premises and all articles likely to be infected; and generally so exercise the powers conferred on them by this Act as to guard and protect the public health and do such things as may be necessary to check and prevent the spread of the disease."[103]

Even, the Bengal Vagrancy Act, 1943 contained a few sections dealing with the 'lepers' and the processes through which the contagious bodies were to be secluded, although, the initiative started since the early years of 1920s. The appointment of the Pickford Mendicancy Enquiry Committee in 1920 showed the concern of the citizens of Calcutta on the eradication of 'beggar evil'.[104] It was considered a persistent problem in the city until 1934 when the Rotary Club of Calcutta raised the issue again and organized a conference of the citizens of Calcutta 6th January (February?), 1935, at which the Mayor of Calcutta Nalini Ranjan Sircar presided over.[105] It is to be mentioned here that one of the early endeavors of this club was the Leprosy Prevention Campaign in 1925. The conference, therefore, had appointed a committee to plan a workable scheme for this purpose. This, to a greater extent, influenced the Calcutta Municipal Corporation (CMC) to look into this matter religiously. On 24th July, 1935, the CMC passed a resolution in a

[103] See *section 376, The Bengal Municipal Act, 1932,Bengal Act XV of 1932*, as modified up to the 1st April, 1939, Legislative Department, Government of Bengal.
[104] See *the Report of the Mendicancy Committee, Calcutta, 1920* (Calcutta: Government Press, 1920), 3-6; See Prosenjit Naskar, "the Beggar Class of Calcutta/ Kolkata: A Historical Analysis of its Origin, Development, and Socio-Economic Conditions: 1941 to 2011," (MPhil dissertation., Jadavpur University, Kolkata, 2017), 73-75.
[105] Nehru Memorial, Museum and Library (hereafter NMML), Private Paper Section, File no. 136, Subject File, B.C Roy collection, the Papers regarding Beggar Problems.

meeting to appeal the government for suitable vagrancy bill. Meanwhile, the Rotary Club formulated a program with the help of the Salvation Army and other bodies and published their proposals in a brochure having an introduction from Sir John Anderson, the then Governor of Bengal.[106] A deputation, led by Mr. N. B Basu and others, i.e. Mr. W. L Armstrong, Mr. D. J Horn, Col. C. F. A Mackenzie (Salvation Army), Mrs. N. Barwell, Mrs. A. N Chaudhury, Dr. A. C Ukil and Mr. W. J Herridge, was given to the Governor of Bengal on 14th January, 1936. The GOB forwarded the scheme to the CMC in February, 1936 requesting for appraisal in this regard. The CMC had appointed a special committee submitting its final report concerning the issue on early 1938. Through the recommendations of the Special Committee, a request was pursued to the government for the enactment of Vagrancy Bill, drafted out by the Rotary Club of Calcutta. Along with that, another recommendation had been put forth to accept the proposal from '*the Refuge'*,[107]a well known home for destitute in Bowbazar street, Calcutta, to provide accommodation for 750 homeless and helpless vagrants of the city who were not suffering from tuberculosis or leprosy. As 'the Refuge' would not want to entertain the contagious cases, the special committee was contemplating the other ways in order to take care of tuberculosis or leprosy affected vagrants.[108] In due course, the Bengal Vagrancy Act came into existence in 1943. Under section 8 (3) of this Act, it was to be said that after the commencement of the detention of a vagrant in a receiving center, the medical officer should examine the vagrant and should thereafter furnish the officer-in-charge of that receiving center with a medical report concerning the health and physical condition of that examined body. Precisely, that report would state the sex and age of the vagrant, whether the vagrant was insane or 'mentally deficient' (?),

[106] See File no. 136, Subject File, B.C Roy collection.
[107] The Refuge, a voluntary organization was founded by Ananda Mohan Biswas in 1908 (1901?), has still been working.
[108] See File no. 136, Subject File, B.C Roy collection.

the general state of health of that vagrant, and the most important thing, whether the vagrant was a 'leper'. [109] Section (9) of this Act had ensured the arrangements for the vagrants. After receiving the medical report, the Officer-in-Charge of a receiving center should send the vagrant to the vagrants' home but the Controller, at first, had to guarantee the segregation of 'lepers', the insane or mentally deficient, those suffering from communicable diseases other than leprosy and children from each other. The authority should also make sure that the vagrants, who did not belong to any of these categories, had been separated from the aforementioned classes and female vagrants as well.[110]

The approach of the colonial administration towards 'leprosy survey' was throughout ambivalent during the Raj. In 1928, under the novel method Propaganda, Treatment, and Survey (P.T.S), the British Empire Leprosy Relief Association or (BELRA) required certain information concerning the leprosy sufferers in the Mymensingh district. For which, the Leprosy Propaganda Officer of BELRA (Bengal Branch), Dr. B. N Ghosh had sent an urgent correspondence to the District Magistrate of Mymensingh, C. W Gurner, with an appeal that all the stakeholders, precisely the officers-in-charge, of the district police stations should be instructed to collect essential information about the 'lepers' from the *daffadars* and *chaukidars* who were assigned to their relevant areas. Ghosh's request was severely objected by Gurner; especially the way the Leprosy Propaganda Officer wished to get the details of the 'lepers' had been criticized by the authority.[111] Therefore, he expressed his doubts to the Commissioner of Dacca on 15th May, 1928. For him, as far the Bengal Police Regulations was concerned, neither the police officials

[109] See *Section 8 (2) and 8(3), The Bengal Vagrancy Act, 1943, Bengal Act VII of 1943*, Legislative Department, Government of Bengal
[110] See *Section 9*, ibid
[111] WBSA, GOB, File no. P 10L/1, Political Department, Police Branch, Pros. Nos. B 260-261, August 1928.

for the purpose of surveying the 'lepers' could be appointed, as it was not defined in the regulations, nor would the Inspector General be perhaps suitable to for this job. Moreover, the information furnished by both *daffadars* and *chaukidars* might be likely the result of mishandling on their part**,** generating displeasure and umbrage among the leprosy sufferers. Similarly, the sub-inspectors' reports to th**e** Leprosy Propaganda Officer had been entirely contradictory to the routine of the department. Gurner sought to submit the proposal of Ghosh for verification to Police Department before leaping in further. This is quite amusing that the Commissioner of Dacca was not convinced by the arguments put forward by Gurner; as an alternative, he reminded him the responsibilities of police relating to 'lepers' which had been written in the sections (6), (7), (10), and (12) of the Lepers Acts, 1898, and the police officials might be requested to provide the details whatever entailed by Dr. Ghosh.[112] [113]

What were the scenarios in other provinces of colonial India? Of course, no significant changes took place as far as the governmental supervision is concerned. The public health policies and municipality acts of the provinces had followed the regulations of the Lepers Act of 1898 in the twentieth century. According to the Madras City Municipal Corporation Act, 1919, shaped by the contemporary public health concerns, most of the infectious diseases were seen as 'dangerous diseases'. Moreover, an infected person could not borrow or use the books from the public library.

[112] WBSA, GOB, File no. P 10L/1, ibid, Memorandum from the Commissioner of the Dacca Division, dated 24th May 1928.
[113] Das, "Seeking the 'Truth' from 'Enumerating' Numbers: Leprosy in Census and Public Health Reports of Colonial Bengal: 1890s-1940s," 236-38.

"No person who is suffering from an infectious disease shall take any books or use or cause any book to be taken for his use from or in any public or circulating library."[114]

Likewise, according to the Madras (Tamil Nadu) Public Health Act of 1939, the government could formulate legislations to stem the spread of epidemic, endemic, and infectious diseases [leprosy was one of them].[115] Some of the colonial legislations were truly discriminatory in the sense that these enactments refused to take the right to life of an individual into account. The Motor Vehicles Act, 1939, section 7 (5) stated that leprosy sufferers or affected person would be disqualified, on the ground of disability, for obtaining a license to drive a public service vehicle.[116] Similarly, sections (47) and (71) of the Railway Act of 1890 declared that, a person suffering from certain infectious diseases, including leprosy, had been 'debarred from travelling in the same compartment with the other persons'.[117] An element of revulsion towards unpleasant sights of 'lepers' was reflected in these legislations which shaped the colonial legal framework about the 'diseased'.

Forging New Legislation: Reviewing the Report of the Committee on Leprosy and its Control in Bengal (1946)

After 1920s, the perception towards leprosy sufferers was apparently getting changed; Gandhi's idea on leprosy, the development in the tropical diseases research, the formation of Orissa province (1936) and the popular ministry (1937) were some of the reasons behind this changing approach. However, the colonial government was reluctant to do away with the policy of segregation, eventually it resulted into the discontentment of leprosy inmates against the asylum

[114] See *The Madras City Municipal Corporation Act of 1919 or Act no. IV of 1919,* 359.
[115] See *The Madras (Tamil Nadu) Public Health Act, 1939,* 24-25.
[116] See *The Motor Vehicles Act of 1939, or Act no. IV of1939,* 14.
[117] See *The Indian Railways Act of 1890, or Act no. IX of 1890,* 52 -71.

authorities during 1930s and 1940s. It is worth to be mentioned that the colonial administrations have had the support of Oriya middle class, legitimizing the colonial class offensive against the 'filthy lepers' who were to be removed from the 'public gaze'.[118] Kakar is of the view that waves of unrest in many asylums were directed more at specific issues rather than at medical practice. These protestations did not aim to turn the western medicinal treatments down altogether. At the Naini Asylum, Allahabad, in 1934, unrest occurred for food shortage. In 1938, some leprosy patients of Ramachandrapuram Asylum were protesting against its religious character. The medical officer documented the incident with a slightly racist tone that the patients were exerting influence on the Christian inmates to wear caste-mark and not to attend the Church services. This popular unrest had turned into an agitation and the inmates went on strike in March, 1939. The authority had to close the asylum and let in those who had willingly agreed to submit to the rules. Hence, this added a new dimension to the complex relationship between empire and colonized people, precisely the leprosy patients who made the asylum authority to reform the policy of compulsory confinement.[119] It, indeed, ensured the rights of the patients.

During the Second World War, the institutional research in medical science opened new vista, especially in the areas like leprosy and venereal diseases. Moreover, the anti-British and anti-imperial nationalist movement brought newer understandings concerning public health, hygiene, and rural reconstruction, (e.g. the constructive program of Gandhi was one of the instances on which Indian National Congress initially relied upon to mobilize the popular support from rural India) in the multifaceted political and civil society of the late colonial India. The circumstances demanded a scrupulous revision of existing legislations on leprosy. The Central Advisory Board

[118] Pati and Chanda, "The leprosy patient and society," 124-25.
[119] Kakar, "Leprosy in British India," 228-29.

of Health (CABH), which appointed a special committee for reviewing the present status of leprosy in India, published a '*Report on Leprosy and its control in India*' in 1941, in which a number of recommendations were offered. To consider and review of those proposals, the GOB, Department of Health and Local-Self Government, had appointed a committee on 26th October, 1945. The Committee, therefore, submitted its report, entitled '*Report of the Committee on Leprosy and its control in Bengal*', on 4th June, 1946, wherein considerable number of pages had been devoted to the discussion of existing legal measures taken against leprosy.[120] When it came to the anti-leprosy work, that had to be carried on voluntary basis, but, in special circumstances, the exercise of compulsion, i.e. the legal provisions, would be needed to encounter such situations. However, these measures should have been applied to the infective (or open) cases of leprosy only leaving the non-infective (or closed) cases. Another principle in the use of compulsion was put forward by the Committee was that if an isolated person supposed to be the sole bread winner of the family, the authority should or would have to or had make provision for the maintenance of his dependents. There were a few shortcomings in the then existing legal powers for the control of leprosy and 'lepers'. The Acts could not make any distinction between infective and non-infective cases of leprosy, as nearly ¾ of cases were non-infective type suffering from legal paraphernalia. Hence, to the Committee, there was no justification of legal enactments against them. For instance, the Bengal Lepers Act, 1895 and the Lepers Act of 1898 failed to resolve the most important issue of the leprosy problem, i.e. the prevention of contact between the healthy and infective person. To arrest and control the 'leper beggars' and prevent the leprosy affected people from certain callings or occupations were not very plausible ways, at

[120] WBSA, GOB, File no. PH 2L-10/46, Health and Local-Self Government Department, Public Health Branch, Pros. Nos. B 53-56, Subject director of public health, Bengal as the Chairman of the Bengal Leprosy Committee submitted a report on leprosy and its control in India, with certain recommendations, Government's appreciation of the valuable services rendered by the members of the Committee, year 1946.

least to the members of the Committee, to reduce the infectivity of the disease amongst the population. These legal provisions seemed to be more concerned with the popular emotion, beliefs, and discourses rather than the actual prevention, although, the Committee did not entirely wither away the question of 'public sentiment' in matters associated with the contagious diseases.[121] The Municipal Acts in Bengal did have the provisions to deal with leprosy sufferers, as these Acts provided isolation for not only the 'uncared' but also for those living with their families and spreading the 'germs' amongst the members. These provisions were not mandatory and never in practice for various reasons. The colonial government would not want to take permanent financial liability by maintaining a center for isolation for the patients who had to be segregated over a long period. Secondly, the Raj was unable to take a stance since 1898 about the compulsory or partial segregation of leprosy sufferers. From the Lepers Act of 1898 to the Local-Self Government Municipal Acts, segregation proved to be a major clause in the provisions, though, the authorities were not clear to themselves concerning the ways in which this segregation would be invoked. It seems that the entire structure of legality, dealing with the contagious diseases, was based on supposed, superficial, and hypothetical understanding of the provisos overlooking the inner intricacies and subtlety of colonial laws. Thirdly, most of the Municipal Acts were concerned about the urban areas than that of rural sectors where the disease appeared to be more prevalent.[122]

Whatsoever, the Leprosy Committee of Bengal had put forth a proposal for a new legislation considering the previous recommendations of CABH which stated that existing legal measures had not been of any practical value. In 1946, the Report of the Health Survey and Development

[121] File no. PH 2L-10/46, Health and Local-Self Government Department, Public Health Branch, ibid,
[122] WBSA, GOB, File no. PH 2L-10/46, ibid.

Committee, known as Bhore Committee Report, included most of the recommendations of CABH concerning legislation on leprosy. The principle conjecture was to isolate the 'infective' cases from 'non-infective', propelling the legal bodies to guarantee the prevention from contagion.[123]

Conclusion

From 1940s, the public health policies regarding the infectious diseases had undergone several alterations. The Bhore committee[124], in 1946, presented its report which was considered as one of the early comprehensive public health reports before independence. Still, the perception on 'segregation', though the Bhore committee's report included 'isolation' as a necessary measure to the 'infective lepers', had not only been articulating the colonial or postcolonial public health policies but also trying to present an ideal portray of salubrious statehood.[125] To protect the healthy population from 'contagion', the colonial state was bound to follow the imperial remedy of quarantining the 'diseases', even if it was not an 'Imperial danger'. Leprosy, as the report of the Leprosy Commission of 1890-91 explained, was not an immediate threat to the colonial administration in India, though; the legal bodies, enmeshed with the trajectories of *coloniality*, did not want to take any chance. The perception of risk continued to have an effect on the means of political command which retained its control over the 'medical space' of colonial India. The emergence of tropical diseases research, the changing colonial mind, and the Empire's continuous search for appropriate policy relating to infectious diseases had reconfigured the

[123] See *the Report of the Health Survey and Development Committee or Bhore Committee, 3 volumes* (Calcutta: Government of India Press, 1946).
[124] The Committee was named after the Chairman Sir Joseph William Bhore (1878 – 15th August, 1960) who was an I.C.S and Diwan of Cochin State. This Committee had been formed in 1943 by the GOI to conduct a survey on the present health condition and organizations of India and to give proposals for the future development.
[125] Das, "Seeking the 'Truth' from 'Enumerating' Numbers: Leprosy in Census and Public Health Reports of Colonial Bengal: 1890s-1940s," 242.

thoughts of colonial officials, creating such an environment where the rights of 'diseased' individuals were systematically marginalized. Precisely saying, the rights of the infective had been largely ignored in contrast to the rights of 'able-bodied', representing the priority of needs on the basis of healthiness. The earlier differentiation in nineteenth century, constructed by the western medicalism, between 'leprous' and 'non-leprous' was later changed into the 'infective' and 'non-infective' in the twentieth century. This shift, from highly referential ideas of having 'leprosy' to more specialized medical idioms representing the leprosy affected patients, was due to the growing problems related to defining the leprosy sufferers in the colonial legalism. To some extent, it was seen by the scholars as a class offensive towards the marginal classes,[126] who were supposed to be unresponsive to the colonial laws; but the popular unrests in the leper asylums seemed to have challenged the system of governance. This was pretermitting the idea which says, as Engels articulated, the freedom is only the condition of appreciation of necessity. Although the enforcement of differentiation did persist in a more refined and filtered way, the legal codes, within the hiatus existed between the Raj and its people, seemingly determined the 'power' and the other way round befitting the prerequisites of imperialism. The accouterments of legality, as Homi K. Bhabha has pointed out, were the means through which colonialism frequently manifested its authority and procured its power for the sake of creating a new *history*. It surely does not indicate that the forms of colonialism, figured in the political structure of British India, were characterized by a one-way legal imposition triumphing over the colonized. The idea of colonial state was, however, made as both potential and susceptible in the course of encounter with the indigeneity. Thus, legalism and nation corresponds each other in a way which

[126] Pati and Chanda, "The leprosy patient and society,"114-125.

is based on the idea of persuasive exclusion, difference and its innate power.[127] Perhaps, the most intriguing and contentious process was the transformation from a pre-colonial medications which rarely conformed the legal imperatives of British India in the early nineteenth century to the colonial hierarchy of medical treatment which was often ensnared with legality. The articulation of difference, which formed the colonial discourses in many ways, was one of the dominant features in British legalism since the late eighteenth century. It produced the stereotypes, stemming through the production of knowledge and identification, dithered between the 'known' facts and the concepts that had been reiterated.[128] For example, the contagiousness, as an idea or stereotype, was continually dawdling amidst the notion of racial susceptibility to the tropical diseases [*known*] and the proposal for segregating or confining the contagion which was often endorsed in the official correspondences, censuses, and private letters of the British officials [*repetitive*]. This sense of equivocation had furnished the meaning of the colonial stereotypes manipulated by the 'regime of truth'. Thus, for nourishing the legal stereotypes associated with the infectious diseases, the influence of inexorability and probabilistic truth about disease manifestation had to be redundant of what could be experimentally and logically proved.[129]

Yet, it is leading to an additional central presumption that asserts the colonial functioning in the history of legislation**.** Colonial legal prerogatives had allowed the administration in widening its dominance and fortifying the sovereign's legitimacy. In so doing, the opposing viewpoints of rule of sovereign power and rule of law in the Raj personified the elemental fracas in the western legal tradition. Here, along with the outfitted intentions, the universalism embodied in British

[127] See the introduction of Diane Kirkby and Catherine Coleborne (eds.), *Law, History, Colonialism: The Reach of Empire* (New York: Manchester University Press, 2001), 1-4.
[128] Homi k. Bhabha, *The Location of Culture* (New York: Routledge, 1994), 66-68.
[129] ibid, 66.

law had always opposed to the unconditional sovereignty that a colonial state possessed. This deviation is understood simply as the eccentric conflict between reason and will. However, the 'rule of law', a sort of periphrastic idea smudging the evident difference between 'sovereign' and 'universal', was deluded, hoodwinked, and sometimes misconstrued in the colonial state wherein the realm of legality had been carved up in special concessions and statutes.[130] The problematic of colonial laws related to infectious maladies seemed to be entangled by such concepts, though, the rights of sovereign, i.e. the colonial state in this context, had always succeeded over the individual preference. The 'dissenters', 'defiant' and 'dejected', these groups of individuals, were the 'observed facts' which the colonial government carefully identified before the emergence of nationalism.[131] British Raj had already made the concept of '*isolating the infirm*' legal through the execution of various Acts and by-laws; however, whether the legislations on the segregation of the leprosy sufferers were evoked strictly in India, remained doubtful. This could not be possible without the success of 'Governmentality'. As an art of governance, 'Governmentality' is a sort of pervasive power structure of the state that governs not only the subject, but also the community, family, individual, and even the 'diseased'. British legalism tried to epitomize the perceptible rapture which was developed with the arrival of modern laws by supplanting the pre-modern values; theoretically, the legalistic theory of sovereignty has been attempting to distinguish the state power from 'other' forms of power, but in the art of governance, the function [was to] is to institute a continuity working upwards and downwards simultaneously in the society. The upwards continuity ensures the way in which an individual, aspiring to govern the state, learns how to govern 'himself, his goods and his patrimony', only

[130] Nasser Hussain, *The Jurisprudence of Emergency: Colonialism and the Rule of Law* (USA: University of Michigan Press, 2003), 5-10.
[131] Hussain, *The Jurisprudence of Emergency*, 5-10.

then he would be successful in governing the state. This vertical line exemplifies the 'pedagogies of the prince', or it can be termed as 'discipline', which corresponds the other, i.e. the downwards continuity. It deals with the concept that the individuals will learn how to become a 'descent subject' of the state when a state is 'conceptualized' or 'rationalized'. This process of rationalization is called *police*.[132] Likewise, 'leprous bodies', to the colonial state, were to be governed in a similar way in order to disciplining the 'diseased' individuals. This was seen in the asylums of the Raj more frequently.

Although, the Raj could not go for outright compulsory segregation, it altogether failed to bridge the gap between the 'Public' and 'Health'. Hence, it was the inner contradiction of colonialism that thwarted the Raj to become a supposed welfare colonial state. Simultaneously, the colonial ideologies, therefore, had not succeeded to provide any significant analytical purpose that would make a difference between the colonial state and the concept of modern state emerging in the nineteenth and twentieth century. To Partha Chatterjee, the 'rule of colonial difference' was solely based on race. The intrinsic unfeasibility of accomplishing the project of the modern state without supplanting the preconditions of colonial rule was never turned down. [133] Thus, improving the conditions of public health in British India holistically was to some extent a secondary consideration to the colonial government, instead, it had been trying to forge a mala fide state of modernity having no accountability to the people, bearing a concocted idea of development, and making the 'sanitizing minds'.

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[132] See Michel Foucault, "Governmentality", in *The Foucault Effect: Studies in Governmentality*, eds. Graham Burchell, Colin Gordon, and Peter Miller (Chicago: the University of Chicago Press, 1991), 86-92.
[133] Hussian, *The Jurisprudence of Emergency*, 28-30; Partha Chatterjee, *the Nation and its Fragments: Colonial and Postcolonial Histories* (New Delhi: Oxford University Press, 1994), 2-30; Partha Chatterjee, *Empire and Nation: Selected Essays* (New York: Columbia University Press, 2010), 1-10.

CHAPTER 3

Objectifying 'Lepers', Constructing Identity: The Colonial Gaze with 'Caring Minds' towards the Leper Asylums in Bengal, c. 1873 to 1956

A man, probably having several leprous ulcers on his body, was travelling in an inter-class compartment of the Chittagong Mail. While trying to hide the ulcerous patches, he felt that he had constantly been observed by an anonymous passenger throughout his journey. The person, closely keeping an eye on that supposed leprosy sufferer, was the renowned leprologist S. N Chatterjee[1], travelling in that same compartment. He carefully noticed both the signs of that infectious leprotic cutaneous case and the way in which the patient came into contact with the children, sitting next to him. This observation, furnished with accurate detailing, was published as correspondence in the January issue of *Leprosy in India*, in 1933. To Chatterjee, this was one of many ways through which leprosy was 'spread to the public'.[2] This correspondence was the apt example of 'objectification' of a body from a medical vantage point and also it showed how the diseased body would have been under unabating surveillance even outside the clinics, laboratories, dissection rooms, and hospital wards. Chatterjee's encounter with the leprosy patient was more than a physician's inspection of a body. Here, the primary concerns were 'public', exposed to the innumerable threats, and the extent in which the spread of leprosy amongst the healthy populace could be seized. When it came to 'public health', the prodigious obligation of the colonial state for protecting its subject from infectious microorganisms had surreptitiously replaced 'the concept of caring' for the individual. Such a way of seeing, called

[1] Sailendra Nath Chatterjee was born in 1896. He was an assistant research worker in the Leprosy Department of the Calcutta School of Tropical Medicine from 1928 to 1954 and was also Councilor of the International Leprosy Association (ILA) from 1948 to 1957. He became the Secretary of the Leprosy Advisory Board of the Indian Council of Medical Research and President of the Indian Association of Leprologists from 1956 to 1959.
[2] See *Leprosy in India* 5, no. 1 (January, 1933): 53.

'medicalization of body', is different from that of institutional objectification. The most familiar dissimilarity lies in the mechanism of objectification itself wherein the relationship between an observer and the object is more likely a one-way progression than the institutional depersonalization, which is entirely based on the web of multiple signifiers and signified, or encounters and responses. In case of individual objectification, the object is always at the receiving end whereas in the institution, especially 'the asylum', the process seems to be working in a more multifarious manner. In 1895, Mr. Uffmann illustrated the feelings of the inmates of the Purulia Leper Asylum which can be treated as an ideal instance of such intricacies. The leprosy sufferers of the asylum had expressed their gratitude and thankfulness to the benefactors on account of receiving blankets distributed by the 'benevolent and liberal supporter' Rev. Uffmann.[3] This 'narrative' of the inmates was, however, largely prepared, if not manufactured, to lionize the works of 'caring minds'. It says:

"We could not have had such blankets if we had been at home. On seeing these things on our bodied, our friends and relatives want to know how we are supplied with them. We tell them that our true friends and real lovers in Europe think of us and make these arrangements. When we speak to them of other things they become astonished and cry out-'how great their courage and love! Where do they get so much money to spend?' we tell them that the Almighty gives them money which they do not like to enjoy themselves." [4]

The reader, nonetheless, must not face any difficulty to perceive this 'narrative' as atypical form of colonial propaganda putting the idea of 'benevolence', 'charity', and 'true friends of Europe' in the same row, as if, these idioms corresponded each other. This institutional way of

[3] National Archives of India (NAI), Government of India (GOI), Pros. No. 123, Home Department, Medical Branch, Part B, March 1897, Report of the Leper Mission in India and the East.
[4] ibid.

presenting the unanimous viewpoint about the utmost 'care' of the 'Mission to Lepers' for the sufferers, dehumanized by their relatives, had helped the asylum authorities to ensure the sustenance of moral treatment. The objectification, thus, appeared to be harnessed through the restoration of morality, probity, and integrity amongst the leprosy sufferers to make them compliant to the 'discipline'. Educating the 'desolates' with moral fabric was perhaps the most crucial attainment not only to the missionaries but to the colonial state as well. Therefore, both the narratives of Chatterjee and the leprosy inmates of the asylum have shared a common line of action, i.e. the confinement of germ and immorality. The former deals with the idea of isolating the '*germed*' entities to minimize the public health risk whereas, the latter is intended to purify the corrupted souls by means of proselytization. This chapter is largely devoted to explore these issues, including the way an Indian doctor's mindset was structured by western medical ethics, widely within the context of colonial Bengal. The reorientation of 'leper' inmates towards the Christian 'faith' for obtaining the moral care, the ideology that devised the propagandized machineries of missionaries, especially the Mission to Lepers working since late 1870s, and the ways in which the leprosy sufferers were disciplined, organized, and controlled in the asylums either by persuasion or coercion, are a few contentions that need to be addressed here. In this regard, the places or spaces that have played a pivotal role in ordering the 'problème populations' of modern states since the Enlightenment are brought under the purview of analysis. The various forms of isolation, i.e. penitentiary, institution, and labor camp along with asylum, have emerged as the models of confinement over the two centuries.[5] However, the practice of disciplining the deviants might differ with the spatial peculiarities and the nature of 'isolated'.

[5] Alison Bashford and Carolyn Strange, "Isolation and Exclusion in the modern world: an introductory essay," in *Isolation: Places and practices of exclusion* Alison, eds. Carolyn Strange and Alison Bashford (New York: Routledge, 2003), 1-2.

But, the devises or means of these confinements, irrespective of structural contrast between a prison and an asylum, are directed to govern the 'unruly people' who require the proper moral, ethical, and righteous edification. Making the subservient subject is the chief prerogative of the state, relying on the discourse of sensibility. The dynamism of 'punishment' in the asylums is much more complex than that of prisons.

This chapter, thence, is an attempt to jut out the inner dynamics of the asylum managements, precisely those of leper asylums, existing in colonial Bengal from the late nineteenth century till 1956 when the Albert Victor Leper Hospital (Abolition) Act was passed to disband the operation of the asylum/hospital and dissolve the board of trustees. On that abandoned property of the asylum, the West Bengal Government had established the Hospital for Mental Diseases, Gobra during 1960s [later known as Calcutta Pavlov Hospital]. The transformation of a 'leper' hospital into a psychiatric institution is what Foucault has explained, while looking into the mental hospitals and clinics of the eighteenth century France, as the paradigmatic shift in the history of confinement. The fear, concerning leprosy for which several leprosariums came into existence in Europe during the early modern period, had been wilted and replaced by the popular phobia regarding the unsound minds or lunatics since the 'Age of Reason'. For him, the structure or modality of the incarceration, although, remained unchanged.[6] Though, Foucault was to some extent unresponsive towards the exact functioning of colonial asylums and the role performed by both the colonial states and the missionaries therein, his theoretical surmises, especially the works on how the diseased or criminals were being indoctrinated in the asylums and prisons, would help the scholars to shape the understanding related to the asylum studies. This chapter

[6] Michel Foucault, *Madness and Civilization: A History of Insanity in the Age of Reason* (Abingdon: Routledge, 1989), 1-5.

also endeavors to differentiate the government asylums from the missionary asylums on the basis of nature of administration. It also makes a detailed analysis of the 'leper' colonies in colonial Bengal to find out whether the 'leper' settlements were entirely different than that of the leper asylums as far as the characteristics of mechanism are concerned.

Isolation and Isolated: Contextualizing Asylums within 'Empire'

Scholars have worked extensively on the origin and development of the early modern asylums. What makes the study of the nineteenth and twentieth century confinements different from other oeuvres, harping on the nature of asylums since antiquity, is the trend of delving into the colonial empiricism about the diseases, bodies, criminal minds, the empire's belief with objective preference, and the rigorous effort to categorize everything. The emergence of institutions to 'care' the 'unfits' is also to be considered as major thread in the asylum studies. The establishment of institutions, lunatic asylums, or correction houses in the modern period are the result of newly invented liberal exclusionism, along with the pragmatism of constructing the identity of 'inmates' which have been unique in contrast to the early modern isolations. But, the intention of liberal states to justify the methods of exclusion in a democratic approach is always undermined in the plethora of asylum studies. Places like sanatoriums and the refugee camps came into being to restrict the movement of 'ailing' people, alongside the Gulags [the exile camps in erstwhile Soviet Russia] and Concentration Camps [forced labor camps of Nazi Germany] of twentieth century. The deterrence and reprisal, manifested through the official narratives of the liberal state before the nineteenth century, were shifted to validation of reform, correction, and standardization by the century's end. This had exemplified liberal and colonial governance as well. The earlier rationale of disciplining the 'selves' had been commuted on the basis of utilitarian principles by delineating the 'protective ideals' of the colonial states with

endurance. Initially it begun at the metropoles, swelling the peripheries gradually; the houses of confinement became the insignias of state-directed embargoes. [7] It is the social question that might be considered as an apprehension about a 'society's ability to maintain its own cohesion'. To Robert Castel, the populations availing privileges from different social intercessions are to be seen and treated according to their working ability. Amongst them, a group of people, consisting aged poor, orphans, crippled bodies, diplegics, morally contaminated persons, and lunatics, falls under the study of *handicapology*. Having heterogeneous characteristics in the 'differently-abled' people, this particular section is divided further into those who are 'truly' unable to work and those can work but do not. This inner differentiation between 'problematic of relief' and 'problematic of labor' has influenced the statist notions to define the 'isolated'. From the sixteenth century onwards, with the emergence of absolutist states, the professionalization of 'caring' the infirm had gradually distinguished itself from 'caring' the impoverished. Especially since the late eighteenth century when the idea of tutelage and the constraints over the labor force of pre-industrial society were replaced by the concept of wage laborer, the liberal ethics of governmentality had conceptualized the idea of 'contracts' and 'commercial liberty' by which the vagrants, who could not survive in this competitive market, had been steadily marginalized. Thus, the protection was limited to selected isolated communities which were the 'societies without the socials'.[8] Moreover, the charity, embedded in the principles of Christianity, revealed the religious adulation of suffering. The ulcerous bodies, blind, disfigured people who needed the assistance, were the signs of God's wrath. It represented the world as 'evil' and the bodies as 'despicable'. For example, the priest, in Hugo's nineteenth century masterpiece '*Les*

[7] Bashford and Strange, "Isolation and Exclusion in the modern world," 6.
[8] Robert Castel, *From Manual Workers to Wage Laborers: Transformation of the Social Question* (New Brunswick: Transaction Publishers, 2003), 3-11.

Miserables', consoled the protagonist Jean Valjean by saying that 'it is your soul that I buy from you; I withdraw it from black thoughts and the spirit of perdition, and I give it to God';[9] the very biblical scripture, implying the sanctity of the 'self', conjoined the ideas of 'disciplining the self' with the 'manifestation of cleanliness'.

Lauren Wilks has argued that in British India, the stigmatization regarding 'leper' became allied with segregation and criminalization in general. This perception, holding the biblical notions of 'sin' and 'unclean', made leprosy a sort of 'medical enigma' that often hamstrung the colonial government to deal with the disease and its sufferers properly. To Wilks, in this context of imperial failure, the missionaries worked in complete autonomy providing primary but essential medical care to the affected. With such determination to work among the 'lepers', the missionaries had impelled the colonial and other governments to distinguish leprosy as a major public health issue. This inference renders a discrete way to get into the role of missionaries in the asylums critically apart from creating an image of 'peripatetic evangelist' attributed to the 'caring minds' frequently by academia. Zachary Gussow and George S. Tracy have strived to see the encounter between missionaries and the leprosy affected population in the light of contemporary scenario. The Gussow-Tracy thesis has pointed out that the missionaries did approve segregation policies in their asylums what Gussow termed as 'separatist tradition'. Thus, the British protestant missionaries followed such tradition to comprehend the problem of leprosy in colonial India.[10]

[9] See Victor Hugo, *Les Miserables, chapter XII*, trans. Isabel Florence Hapgood (New York: Carleton publishers, 1884), 106.
[10] Lauren Wilks, "Missionary Medicine and the 'Separatist Tradition': An Analysis of the Missionary Encounter with Leprosy in Late Nineteenth-Century India," *Social Scientist* 39, no. 5/6 (May-June, 2011): 48-49.

Whether the paternalistic munificence towards the 'affected' or to control the movement of leprosy sufferers were the reasons behind such segregation is a matter of concern. The arguments, nonetheless, were in favor of confinement, which was prevailing idea amongst the missionaries. Jean Comaroff has found a sort of linkage between the colonial compassion and 'civilizing colonialism' that valorized the acts of missionaries. The models of colonialism had presented an ideal association of bureaucratic colonialism with British administration, prioritizing the disease (or diseased) control as the foremost concern of the colonial state. To Comaroff, colonialism in Africa and India was never hidebound; instead, the leprosy policies and its executions appeared to be reconfigured by the mélange of Christian imagery, bio-medical concepts, and political appropriateness.[11] The unholy nexus between the expansionist nature of British imperialism and the prerogatives of missionaries is overtly validated by recent scholarships, arguing that the charters of missionaries had been frequently in line with larger imperial dynamics. For example, Catherine Hall and Kathleen Wilson have explained the process of 'otherization' which was fairly crafted by the missionaries through their 'rhetoric, activities, and imaginations'. Wilson is even more radical in her approach describing missionary instructions as operatives to make 'Christian subjects' out of the 'other'.[12] This tendency in missionary and imperial historiography has focused on common and popular missionary figures failing to notice little known persons, who worked in rural areas, institutions, and pilgrim centers in colonial India over the years. The popular beliefs, imaginations, rhetoric, and the missionary publications have largely prepared the line of reasoning at the price of more profound and

[11] Megan Vaughan, *Curing their Ills: Colonial Power and African Illness* (Cambridge: Polity Press, 1991), 7-8; see Jean Comaroff, *Body of Power, Spirit of Resistance: The Culture and History of a South African People* (Chicago: University of Chicago Press, 1985), 2-8.
[12] Hayden J. A. Bellenoit, *Missionary Education and Empire in Late Colonial India, 1860-1920* (Bloomsbury: Pickering and Chatto Ltd., 2007), 6.

productive exchanges with the colonial societies. But this historiography has largely undermined the role of those missionary figures hitherto unknown in the existing literature. Hayden J. A. Bellenoit has linked these missionary interactions with the other religious sects in the late nineteenth century political contour of north India. As the missionaries perhaps could have better understanding about the cultural and religious heritage of India, their approach towards the development of Indian nationalism during early twentieth century was more efficacious and appealing than the colonial state, which proved to be detrimental so far. But, Bellenoit has intended to appraise the way in which missionaries got engrossed with the nationalist spirit of *bhadraloks* through their scholastic endeavor. The student hostels, especially maintained by the missionaries, turned out to be the anti-colonial political enterprises. Most of the government lodgings were in poor conditions in Allahabad, Kanpur, Banaras, and Lucknow where the missionaries increased their influence by setting up hostels for English educated *natives*. These student hostels extended very personal interaction with the people that missionaries sought after. In this process of interaction, the 'Caring minds', at their primary instance, had sympathized with the continual anguish of educated *bhadraloks* in the colonial regime and in turn, this empathy would eventually benefit 'their own evangelical causes'. This residential system, to the missionaries, supposed to be stencils wherein their dream of ideal statehood [likely to be developing into the 'colonial Christendom'] could be brought about.[13]

'Care' or charity towards feeble, somehow, emerged as a response to the dominant religious teachings since pre-modern period. It became an integral part of the colonial policies regarding the 'poor' in its broadest sense during the age of empire building. In eighteenth century America, the colonists hardly paid any attention to the deviants or dependants whom they thought a part of

[13] Bellenoit, *Missionary Education and Empire in Late Colonial India, 1860-1920*, 155-156.

the society per se. The penury or destitution had been put under the local jurisdiction or city councils, erecting almshouses for them. This attitude to the poor was to some extent influenced by one of the most leading institutions, i.e. the Protestant Church. It took the problem of destitution and its relief as the issues to be resolved only through moral obligations. The colonists usually aided the 'poor' in the community halls, but never in the separate institutions. Perhaps, the legal authorities could not find any reason to reprimand the 'deprived' unnecessarily as long as they seemed to be less threatening to the order of the society. From 1830s onwards, during Jacksonian era, the need for establishing institutions for the criminals, lunatics, and vagabonds was felt amongst the Americans, appraising the previous ideals of 'supporting the poor' in the light of growing criminality within the 'depraved' population. David J. Rothman has explained the way in which the social tension was responsible for the 'discovery of asylum';[14] Apart from these concepts, what are usually taken up by the scholars, the problems remaining in the usage of the terms are often unaddressed in the disability studies. Such as, the meaning of 'idiot' in the nineteenth century was different from that of 'lunacy'. The former referred to those who had been regarded 'mentally disabled' by birth or what commonly was perceived as 'learning disability' in Britain (not in North America). Idiocy, hence, was a permanent state of mental disability as coded in the statues of property rights since the thirteenth century, whereas, the 'lunatics', on the other hand, referred to the people who were previously 'sane', but now were suffering from momentary or enduring impairment of rationality. To the medical world, the term 'lunacy' was more clinically accurate than the words like 'mad' or 'crazy' which had been widely used in the literary discourses to describe the nature of unsound minds. In Victorian England, a division was literally made and the ascendancy of 'lunacy' over 'idiocy' was

[14] David J. Rothman, *the Discovery of the Asylum: Social Order and Disorder in the New Republic* (New York: Aldine de Gruyter, 1990), 58-59.

manifested both in the precedence of nineteenth century asylum builders and in the historiography of asylums. Therefore, the 1845 Lunacy Act and the pauper lunatic asylums of counties were appeared to manage the 'lunatics' of England and Wales.[15]

The 'insanity', having certain legal connotations, was employed as an overarching expression, encompassing all the 'mad population' during this time. Thence, the legislations were framed and defined in order to accommodate the 'insane', representing 'idiots, lunatics, and persons of unsound mind' that had been classified in the Victorian legal codes.[16] Insanity or lunacy was not the only disquiet to the administrations; alcoholism also seemed to be a persistent threat in Anglo-American society since the late nineteenth century. The 'inebriety specialists' called for setting up asylums to 'cure' the addiction, seen as disease, by isolating the alcoholic. Therefore, the concept of alcoholism and the emerging asylum treatments had dominated the ideas to deal with the 'drunkenness' since 1850s. It was the serious social aberration demanding a paternalistic solution in the form of a medical care. Although, many physicians needed alcohol for the treatment during 1830s and 1850s, some of them considered it as 'poison', liable in producing the 'inebriated populace'. The legislative control was necessary to confine the drunkards.[17] As the legal authorities usually perceived and examined criminality by inquiring into the habitual tendencies or typecasts [alcoholism was one of them] which a criminal must have, the characteristic features of an alcoholic were surely the matter of concern to the state. Confining the inebriate populace, to the state, would have been problematic because of their distinctive

[15] Joseph Melling, Richard Adair, and Bill Forsythe, "'A Proper Lunatic for Two Years': Pauper Lunatic Children in Victorian and Edwardian England. Child Admissions to the Devon County Asylum, 1845-1914," *Journal of Social History* 31, no. 2 (winter, 1997): 371-405.
[16] David Wright, *Mental Disability in Victorian England: the Earlswood Asylum, 1847-1901* (Oxford: Clarendon Press, 2001), 9-10.
[17] Edward M. Brown, "'What shall we do with the inebriate?' Asylum Treatment and the Disease Concept of Alcoholism in the late Nineteenth Century," *Journal of the History of the Behavioral Sciences* 21 (January, 1985): 48-57.

features that hardly matched with other 'infirmities'. The colonial need for reforming the habitual criminal mind of the natives was influenced by the idea of 'freedom' more than anything else. Situating the 'weird' indigenous people in the 'universal' institutions, like confinements or incarcerations, could be consequential in providing, putting off or denying 'freedom'. The disciplinary regimes in the British Raj, starting from the late nineteenth and early twentieth century, had been highly racialized and also carefully edited by the experts and devised by amateurs, swindlers, and intruders. Institutions, thus, were no longer mere prisons, asylums, hospitals or schools, but, journals, genus of literature, even *raciality* as well. The concept of nationhood transformed through the 'institutions' is undeniably interwoven with the contention of freedom. What John Stuart Mill had envisioned was the overlapping of confinement with the civilizing process in the 'early states of the society'. Separation of individual impulse, the effective self control contained in the 'soul', and disciplining the inner desires could be detrimental to the progress of individuality, but in case of children and savages, there would be an exception in putting them under rigorous tutelage with an 'education of restraint'. This form of guidance was nonetheless instrumentalized as a means of developing their quiescent conscience which in future would place them into 'the privileges of freedom', though; Mill was quite skeptical about the 'right to force another to be civilized'.[18] Therefore, freedom to the inmates, prisoners, and patients were not necessarily identical with the freedom what colonizers or native elites perceived. Here, the linear relationship between the recipient and law-giver had been turned into more complex and diverse ones. The former intended to relate with its 'subaltern past', which was resistant to the secular-rational representation, and the latter had produced the spaces of isolation where the deviants could be tutored to realize the value of

[18] Satadru Sen, *Disciplined Natives: Race, Freedom and Confinement in Colonial India* (New Delhi: Primus Books, 2012), 1-12.

freedom. To Dipesh Chakrabarty, the subaltern pasts, with which the colonial recipients [non-elites] could correlate, are by nature illiberal, formed out of patriarchal familial bonding and the disheveled limitation of individual autonomy, although; this illiberality might have been entrenched in acts, defying the 'confining experience of colonialism'. However, the institutional guidance was a failure in British Raj which successfully produced 'racial difference'. It was later disseminated amongst the 'institutional regimens' of the colonial state, notifying everything from nutritional regime to sexual options. The persistent reasoning of failure and success was interlinked with the liaison between confinement and freedom in the racialized institutions.[19]

The asylums, likely the therapeutic estates, have a sort of typical spatial configuration that intrigues the scholars more than any other 'spaces'. In the nineteenth century, the asylums for 'disabled' were commonly built with a purpose devised to be curative. The Retreat in York and Brislington House, Bristol of 1790s and early decades of 1800s had been not only the models of the madhouses in England but also the ideal institutions for other infirmities. These novel landscapes had a number of prerequisites to meet the requirements of a rapidly growing institutionalized society. It required a form to buttress its efficient working, both at the core and peripheries of the Empire. The warehouse of asylum buildings, designed at rural-landscapes, had been set up for almost 2,000 patients. They employed most of the features associated with the country-house estate, such as lodges, avenues, pleasure grounds, glasshouses, fences, and *ha-has*.[20] From 1845 to 1914, almost 96 public asylums were erected in England, including 20

[19] Satadru Sen, *Disciplined Natives*, 2.
[20] Ha-ha is a dug in landscape creating an upright barrier while maintaining an unobstructed view of the landscape beyond. See Bree Carlton and Emma K. Russell, *Resisting Carceral Violence: Women's Imprisonment and the Politics of Abolition* (Switzerland: Palgrave Macmillan, 2018), 232.

asylums in London alone.[21] In colonial India, the Raj followed similar modules for constructing the asylums to confine the 'lunatics' and 'lepers' at the fringes of cityscapes. This concept of 'diseased' was not necessarily formulated by the society that was abided by socio-medical discourses, but the family which played a crucial part in typifying the 'illnesses'. Scholars, like Patricia E. Prestwich, have pointed out that sometimes the families, neighbors, or any other non-medical authorities already had identified the affected as 'diseased' prior to their medical diagnosis by asylum doctors. Patricia, while working on the Parisian insane asylum during 1876 to 1914, has attempted to review the dynamism of 'medicalization' that needs a precise evaluation of familial plead for medical services. She has shown how far the emerging psychiatric profession had encountered with such situations. The asylum records would be the tangible sources that could reflect on familial decisions to 'take' the 'diseased' to the 'road to the asylum'. Local police of Paris had usually sent the people, seemed to be 'unbalanced' and 'dangerous', to the *Infirmerie speciale* which was built alongside the central police detention cells. At the aforementioned 'infirmity' cell, the patients were put under psychiatric examination and, if the authority verified them as insane, they had been further moved to the Admissions Office of the Department of the Seine, located on the grounds of the Sainte-Anne asylum. In that office, the supposed 'insane' people were again examined by the doctors and finally transported to one of the asylums in the Seine Department.[22] Therefore, such examinations, having different modalities, were also required to verify whether the inspected bodies had been 'leprous' or not.

[21] Sarah Rutherford, "Landscapers for the Mind: English Asylum Designers, 1845-1914," *Garden History* 33, no. 1 (Summer, 2005): 61-86.
[22] Patricia E. Prestwich, "Family strategies and medical power: 'voluntary' committal in a parisian asylum, 1876-1914," *Journal of Social History* 27, no. 4 (Summer, 1994): 799-818.

Identity of *diseased*: 'Lepers' in the Asylums of British India

The earliest reference of leper asylum in India dated back to the eighteenth century. The Cochin Lazarus Hospital was built by the Dutch in 1728 at Pallypuram.[23] Wellesley Bailey, the founder and the General Secretary of the Mission to Lepers, on his tour to the leper asylums in India in 1886-87 came to this institution and described the spatial configuration of the Asylum vividly. There were two sets of 14 houses of which 7 houses were for the males and the other set of houses was for females. Having plenty space between the strips of houses, a row of elegant plantain trees had existed in the middle. The inmates were mostly Roman Catholics and native low-caste people.[24] Most of the asylums came into existence during nineteenth century with the emergence of British paramountcy, though the process had been sluggish, unequal, and reliant over individual program, while having no such governmental policy. [25] During the Company regime, the concern was to build poor houses for the 'leper beggars' at the outskirts of the cities. In Calcutta, a few gentlemen had pursued the problem of 'leper beggars' in the city to George Dowdswell, the Chief Secretary to the Government. On 7th March, 1810, they requested for a suitable asylum for the 'lepers'. They had suggested two alternatives; either the fifty bigghas at the vicinity of Calcutta or the piece of ground, existing between General Hospital and Alipore Bridge, could have been selected as a place for the proposed asylum. They also stated that the government might decide whatever it thought as feasible to resolve the issue. It is evident from

[23] O. P. Jaggi, "Medicine in India: Modern Period," in *History of Science, Philosophy and Culture in Indian Civilization* 9, *Part 1*, ed. D.P Chattopadhyaya (New Delhi: Oxford University Press, 2000), 180.
[24] Wellesley C. Bailey, *A Glimpse at the Indian Mission Field and Leper Asylums in 1886-87* (London: John F. Shaw and Co., 1888), 37.
[25] Jaggi, "Medicine in India: Modern Period," 180-82.

the letter, sent from Saint John's Church, that the 'leper beggars', strolling around the streets and taking alms from the city dwellers, had become menace to the inhabitants of the city.[26]

These institutions, in different presidencies, were meant for providing only shelters to the 'lepers'. In 1856, Morehead had acknowledged that leprosy was sufficiently 'common in India'. The arrangements and accommodations of the leper asylum in Calcutta, to him, were inadequate for the patients. Whereas, the arrangements in the leprosy asylum of Bombay were superior to those of Calcutta but inferior to the 'leper' establishment of Madras:[27]

"…there is accommodation allotted for them in the Jamsetjee Jejeebhoy Dhurmsala, and under exacerbations of the disease, they are received into ward of the Jamsetjee Jejeebhoy Hospital appropriated for the purpose."[28]

Between 1848 and 1853, there were 391 leprosy sufferers admitted to this *Jamsetjee Jejeebhoy dharamshala*, amongst which 99 died. However, this *dharamshala* was not originally meant for the leprosy sufferers only; primarily, it was built as a charitable institution for unaided people, but eventually it turned into a house for the leprosy sufferers. Bailey found that there was no attempt to segregate the sexes in the *dharamshala*; to him, this was unprecedented where every 'leper' was put together in cells of 6 x 8 feet. The medical care, hygienic and balanced diet, healthy food, and environment had been the basic needs what a leprosy patient required. In this asylum, no such effort was seen. Bailey seemed to be little worried about the condition of this *dharamshala*.[29] The Madras Government Leper Hospital received 212 leprosy cases in 1851 and

[26] NAI, GOI, Pros. No. 31, Home Department, Public Branch, part C, dated 9th March 1810, Leper beggars.
[27] Jaggi, "Medicine in India: Modern Period," 181.
[28] Charles Morehead, *Clinical Researches on Disease in India* (London: Green Longman and Roberts, 1860), 695-96.
[29] Bailey, *A Glimpse at the Indian Mission Field and Leper Asylums in 1886-87,* 8.

1852. Books had been provided to the educated, and the other 'light occupations', which were beneficial to health, simultaneously were supposed to be encouraged.[30] Bailey had described this hospital as well maintained 'both as to its external and internal arrangements'. Patients were 'clean' and 'comfortable' here in comparison with the *dharamshala* of Bombay. In 1886-87, it had 149 inmates of whom 105 were men, 37 women, and 7 children. Most of them were *natives*.[31]

Shubhada S. Pandya has explained that ostracizing the 'lepers' was not the custom in Indian families. It was only in the cities where the outcast and vagrant 'lepers' swarmed, and their encounters with the administrations were observed. In the Bombay Presidency, the urban leprosy population had usually been the outcast migrants either from the coastal areas of the Presidency or from the lower social order. [32] Pandya has raised an important issue related to the social approach towards the leprosy patients that has been practiced in Indian families since pre-colonial period. 'Isolating' the diseased body, for Pandya, does not necessarily mean 'outcasting' them. The former, deals with the concept of prevention, is often required in the treatment of leprosy patients, but the latter is the way in which the leprosy person has been socially penalized.

This hypothesis, to some extent, is problematic when it delves into the elusive understanding of the word 'outcast'. Pandya has failed to see the complexity of the 'social isolation', i.e. 'outcasting', that was perhaps exercised frequently in pre-colonial India. This was, of course,

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[30] Morehead, *Clinical Researches on Disease,* 695; see the Madras Tercentenary Commemoration Volume (Madras: Oxford University Press, 1939), 56; A Madras Public letter dated 26th September, 1816 shows that a 'leper' hospital was completed at a cost of 983. This hospital was later known as the Madras Government Leper Hospital. In 1921, during the governorship of Lord Willingdon, the scheme for 'leper' settlement was taken into consideration, finally the hospital was closed and the Willingdon Leper Settlement was founded near Chengleput under the Missionary management.

[31] Bailey, *A Glimpse at the Indian Mission Field and Leper Asylums in 1886-87,* 23.

[32] Shubhada S. Pandya, "Leprosy in the Bombay Presidency, 1840-1897: Perceptions and Approaches to its control*"* (PhD thesis., Mumbai, 2001), 1-21.

subject to change according to the local oddity. In the report, presented by J. A Dunber, Deputy Inspector General of Hospital in 1864, the 'lepers' were under no such legal compulsion, only there had been social restrictions in Banaras, Mirzapur, and Gazipur, where neither any legal restriction nor any segregation was enforced; the leprosy affected people were allowed to communicate freely with each other. [33] At the end of the century, it was almost apparent to recognize the leprosy asylums in the British India, not only as the 'institution for curing leprosy', but the homes for the 'lepers' by both the colonial state and medical sorority.[34]

On 8th December, 1862, the Secretary of State, C. Wood had sent the quarries of Royal College of Physicians, concerning the condition of leprosy in British India, to the Governor General of India in Council. Out of 17 interrogatories, there were only two related to the segregation of 'lepers' and the asylums.[35] *The Report of the Royal College of Physicians on Leprosy*, which appeared in 1867, had clearly shown that no such government laws were imposed upon the 'lepers' in Bengal but the people tried to avoid them in bazaars and the streets. Only in Gaol, Burdwan, the segregation was enforced. There was an asylum for 'lepers' in Calcutta, as mentioned earlier, having several detached buildings under the supervision of a native resident doctor and the dressers with other servants. Some buildings were capable of holding 18 to 20 beds; rest of them contained 12 to 14. The segregation of sexes had been strictly maintained in the asylums.[36] As far as the other districts were concerned, only the government dispensaries and

[33] Institute of Development Studies(IDSK), Kolkata, *Character and Progress of Leprosy in the Upper Provinces and North Western Provinces*, Medical Department, Allahabad Govt. Press, 1863, Replies by J.A Dunber, Deputy Inspector General of Hospitals, Benares Circle; this was collected from a project undertaken by IDSK.
[34] Jo Robertson, "The Leprosy Asylum in India: 1886-1947," *Journal of the History of Medicine and Allied Sciences* 64, no.4 (June, 2009): 474-517.
[35] NAI, GOI, File no. 290, Central India Agency (CIA) Office Department, Medical Branch, 1863, character and progress of leprosy in India.
[36] See *the Report on Leprosy by the Royal College of Physicians prepared for Her Majesty's Secretary of State for the Colonies* (London: George Edward Eyre and William Spottiswoode, 1867), 142-43.

pilgrim hospitals were open for the treatment of leprosy sufferers. In North-Western Provinces, the leper asylums existed in Banaras, Allahabad, Agra, Dehra, and Almora. Amongst these, a few institutions were upheld by the local charitable organizations or relief societies. The Agra Leper Asylum came into existence in 1861 by the Agra Local Relief Society; whereas, the Leper Asylum in Allahabad, i.e. Naini Asylum, was founded in 1876 and maintained by District Charitable Association, although, the Superintendent had been an American Presbyterian Missionary.[37] Later on Dr. Sam Higginbottom[38] became the superintendent of the Asylum in 1903. Individual British munificence led to the foundation of an asylum, such as the Almora Leper Asylum. The plan for constructing this Asylum was germinated in 1836, but it was only in 1849 when a permanent residence had been built for the leprosy patients. Sir Henry Ramsay, who formed this Asylum for the sufferers of Kumaon, initially had paid off the expenses and maintenance cost by himself. Later on, Mr. and Mrs. Budden of the London Missionary Society had commenced work at this place. [39] Ramsey had pointed out the importance of leprosy investigation in Kumaun district in a letter addressed to the Lt. Governor of the North-Western Provinces in May, 1875. To him, no other place could be considered as ideal in India than this district for conducting the leprosy inquiry.[40]

Few asylums were set up with the help of regal offerings. For instance, at Lucknow, the King's Poorhouse for blind, maimed, leprous, infirm, and the helpless was founded by Royal charity. In 1831, after ascending the throne of Awadh, Nawab Naseer-ud-din Hyder had established this

[37] Robertson, "The Leprosy Asylum in India: 1886-1947," 493-495.
[38] Dr. Samuel Higginbottom was an American Presbyterian Missionary born in 1874. He came to India in 1903 and joined the North India Mission of the Presbyterian Church. He was also the founder of the Agricultural Institute in Allahabad, (now Sam Higginbottom University of Agricultural, Technology and Sciences) in 1910.
[39] Bailey, *A Glimpse at the Indian Mission Field and Leper Asylums in 1886-87,* 107; Robertson, "The Leprosy Asylum in India: 1886-1947," 501.
[40] See Timothy Richard Lewis and David Douglas Cunningham, *Leprosy in India: A Report,* 14.

Poorhouse and City Hospital under the superintendence of Dr. Logan. Since 1858, the management of the institution was bestowed upon a city magistrate with a committee of European officers where the Commissioner was the President and the Deputy Commissioner became the Vice-President.[41] At Serohi, under Rajputana, 'lepers' were forced to live outside the villages, but no regulations had been put into effect, on the other hand, the leprosy sufferers were said to have lived in a cave at Mount Abu. There was only one hospital at Jaipur, in which the 'lepers' were let in. Throughout Central India, however, there were no restrictions or segregations regarding lepers; seldom, the sufferers might be admitted into public dispensary that belonged to the Raja of Gwalior. In Mysore, Bangalore had an asylum established in 1845 by Sir Mark Cubbon.[42] Bailey also visited this institution during his trip. It was a 'nice asylum', as he said, where the diseased people found 'blessings of Christ'. [43] These asylums had been functioning either under private charity or government support, but hitherto the British Raj had no such comprehensive idea, at least till 1872, about how far had this disease affected the subject and whether the asylums had followed some sort of rules uniformly. Even few of the Surgeon Generals and local administrators failed to provide necessary information to the Governor General of India due to the dearth of materials.

Jo Robertson is of the opinion that historically and geographically, the leprosy asylums in the nineteenth and the twentieth century require a differentiation as a site. The dynamism of asylum management, the structural complexity of the space, and the possibilities of the evolution needs to be fathomed in this context. Between 1856 and 1910, the ideas concerning the nature of a

[41] Bailey, *A Glimpse at the Indian Mission Field and Leper Asylums in 1886-87,* 104; Robertson, "The Leprosy Asylum in India: 1886-1947," 491.
[42] See *Medical reports from the Character and Progress of Leprosy in the East Indies being answers to Interrogatories by the Royal College of Physicians, London* (Calcutta: Foreign Department Press, 1865), 485.
[43] Bailey, *A Glimpse at the Indian Mission Field and Leper Asylums in 1886-87*, 30-31.

leprosy asylum had undergone several stages of fruition, ranging from the emergence of the hospital asylums in Norway to the foundation of model leprosy colony of Culion and Philippines. Finally after Cairo Congress in 1938, the emphasis of expertise had moved from metropolitan, rather than the 'imperial centers', to the colonies. The Matunga Leprosy Asylum, opened in 1890 at Bombay, was financed by subscriptions and by the Municipality of Bombay.[44] There were few leprosy asylums under the 'Mission to Lepers' in Bengal such as Purulia, Asansol, Raniganj, Bankura, and Bhagalpur, amidst which Purulia Asylum was the largest. This was founded in 1884 by the Rev. Heinrich Uffmann, but received financial aids from the Mission in 1888. The Leper Asylum at Bhagalpur appeared as an outcome of liaison between British and Indian local benevolence. Shib Chandra Banerji, Rai Bahadur, the Chairman of the Bhagalpur Municipality was the prime mover in setting up the institution.[45] This was not the only example of such co-operation though. Dr. Mahendralal Sarkar[46] with the help of other philanthropists founded Raj Kumari Leper Asylum, at Deoghar in 1895. The rules made for this asylum, being a charitable institution which was administered by a Board of Trustees, had been in conformity with the rules of GOI related to the charitable institutions and 'with the provisions of the Lepers Act, 1895' [before the framing of Lepers Act 1898].[47]

The pilgrim centers, where the leprosy affected people thronged annually to get rid of the 'curse' carrying on their bodies, were the places to be seen as the ideal for the asylum constructions. For reconnaissance, the colonial government had always spied on these pilgrim centers which seemed to be the potential threats to public health of the surroundings. Pandya said that the

[44] Robertson, "The Leprosy Asylum in India: 1886-1947," 487.
[45] Robertson, "The Leprosy Asylum in India: 1886-1947," 494; Wellesley C. Bailey, *the Lepers of Our Indian Empire: A Visit to them in 1890-91* (London: John F. Shaw and Co, 1891), 148.
[46] Dr. Mahendralal Sarkar, the Founder of the Indian Association for the Cultivation of Science in 1876, was a renowned physician and maverick personality of nineteenth century Bengal.
[47] Odisha State Archives (OSA), Government of Bengal (GOB), File no. 3-L/7, Municipal Department, Medical Branch, Pros. Nos. A 7-9, May, 1903, Acc. No. 12565, Rajkumari Leper Asylum at Deoghar.

leprosy sufferers got treatment in the locally established poor-houses along with the other recipients of charity. Traditionally, the *dharamshalas*, situated at pilgrim centers and temples, provided shelters to the persons with 'disabilities'; later on the 'lepers' were shifted to the asylums constructed at those places of worship. [48] For example, every year, the Baidyanath Temple at Deoghar, where the Leper Asylum was founded, received the 'leper' pilgrims who visited the shrine for cure. Even, Puri became one of the most crowded places amongst the pilgrim centers where the leprosy patients and beggars gathered. The Mission to Lepers in India, with its idea of charity and benevolence that embedded in the British paternalism and Indian practices too, had restructured the functioning of leprosy asylums. This compassion was gradational and tapered, to some extent notional. It articulated through the 'appropriation of land and the development of the built environment'.[49] Seemingly, the situation was facilitated by a political void in the nineteenth century British Raj that paved the way for missionary engagement. A kind of medical, spiritual, and economic rules of value would be generated when a little had been offered by the colonial administration to ameliorate the anguish of those with leprosy.[50]

Confinement and the Confined: the Colonial Governance in the Leper Asylums of Bengal

The Albert Victor Leper Asylum, Calcutta

The colonial government viewed asylums as the places to be effortlessly monitored. In case of leper asylums, the voluntary isolation was in practice but the purpose of the asylum administration was to 'confine' the people who seemed unhealthy and indisposed. Initially, it aimed to control the movement of 'leper' beggars in the municipal areas, although, gradually the

[48] Robertson, "The Leprosy Asylum in India: 1886-1947," 491.
[49] Robertson, "The Leprosy Asylum in India: 1886-1947," 516.
[50] ibid, 516.

other leprosy affected people who were deserted by their families came to these asylums. In this regard, the hospital and asylum have shared a few commonalities concerning the management and objectification of the 'infirm' bodies. Both these institutions are meant for caring the diseased who are supposed to be under medical supervision. Here, the bodies are seen as the materials for 'scientific research', valorizing the supremacy of 'medicalism'; but the way in which people are treated in the asylums is to some extent different than that of hospitals. The governance in the asylums, where not only the bodies but the very existence of the ailing people are put into the four walls, has considerable authority over the diseased in contrast to the power of hospitals administration. During the Raj, the perfect blend of religious and medical persuasion with administrative coercion made the asylums unique amongst all other forms of confinements, i.e. jails or reformatories. Sometimes, it was not the disease but the dissent minds of infirm, which could harm the British rule in India, bothered the colonial government. This form of colonial governance had intended to redefine the idea of power manifested on the inmates of both the government and missionary asylums. The governance of Calcutta Leper Asylum, situated at Amherst Street, was under the District Charitable Society since 1830. The institution, however, was established in 1811 by Mr. J.H Harrington, who was a Civil Servant and a member of the Council. This happened shortly after George Dowdswell, the Chief Secretary to the Government, had received a letter from St. John's Church. Harrington hired an area at Ballygunge and erected huts for leprosy sufferers. In the following year, Mr. Harrington had transferred the establishment to the Select (St. John's) Vestry, although, the former remained a liberal contributor to the funds.[51] On 22nd August, 1818, formally the foundation of the Calcutta

[51] West Bengal State Archives (WBSA), Government of Bengal (GOB), File no. 3L/1, Municipal Department, Medical Branch, Pros. Nos. 4-51, October 1893, Albert Victor Leper Asylum and Management of the Leper Asylum.

Leper Asylum was taken into consideration in the general meeting of the European and few '*native*' gentlemen at the Town Hall.[52] In this meeting, Raja Kali Shankar Ghosal of Bhukailash had been nominated as the Governor of the Asylum for life and a Committee of twenty four people was appointed. Ghosal had donated 12 bighas of land, where the permanent residence of the asylum could be built, along with Rs. 5,000 for the maintenance. It was thought, in a letter on 25th October, 1819, that this institution would help those numerous helpless and loathsome 'beings' out of the misery what they had faced:

"The objects proposed by those who associated to form it were twofold-to withdraw from the public view the numerous helpless and loathsome beings who had hitherto wandered about the streets of the city, a burden alike to themselves and to the community from which they were outcasts and to rescue those beings from misery laying open to them an asylum, which should at once provide for their comfortable maintenance and, as far as medical aid might be found availing, assuage their pains."[53]

From its inception, the Calcutta Leper Asylum had undergone enormous financial difficulties as the adequate funds could not be raised. In these circumstances, the Committee had decided to restrict the admission of leprosy sufferers to 150 instead of 300. Meanwhile, the government referred this proposal to the Medical Board, but it came up with certain qualms. The Medical Board, in its report, had stated that this institution might engender the influx of 'lepers' from other provinces which would prove to be the major problem for Calcutta. Such incident ensued a few years before in Madras Presidency when a similar experiment was commenced. In order to prevent this arrival, the only feasible means/way, to the Medical Board, was to build several leprosy institutions in other cities and pilgrim centers. The government had turned down this

[52] File no. 3L/1, Municipal Department, Medical Branch, Pros. Nos. 4-51, October 1893, ibid.
[53] File no. 3L/1, Municipal Department, Medical Branch, Pros. Nos. 4-51, October 1893, ibid.

proposal and the sums collected for the construction of the building were returned to the subscribers and donors. Eventually, the plan, approved in the meeting of 22nd August, was in abeyance. But this was resolved in a couple of years and in 1824, the Asylum was removed to Balliaghata.[54] During 1830s, the Society found it rather challenging to offer European medical attendance to the Asylum frequently from the city and bringing it into the town. It would surely be a problem to the city-dwellers. The government had provided a grant to the Society for the new site at Amherst Street where finally the Asylum had been shifted with permanent buildings in 1848. The issues such as the financial responsibility, the maintenance of the Asylum and the constitution of Governing Body often had become a bone of contention amongst the Governors of Native Hospital, the District Charitable Society, and the Select Vestry. For example, in 1832, the Governors of the Native Hospital took over the Leper Asylum, in compliance with the proposal from the President of the District Charitable Society, Sir Edward Ryan; the leprosy patients were put under the Native Hospital Institution (the Mayo Hospital). Therefore, the District Charitable Society was relieved of the charge of the Leper Asylum and in June 1833 a Leper Asylum Committee had been formed to examine the accommodation and financial condition of the institution. In this report, the Committee was of the opinion that it should not come within the jurisdiction of the Native Hospital.[55] Thus, on 31st August 1835, the District Charitable Society had again assumed its charge.[56]

The government was much inquisitive about the management of the Asylum. In 1873, Horace A. Cockrell, the Chairman of the Justice of the Peace for Calcutta, had clearly stated in a letter to the Secretary to the Government of Bengal (GOB), Judicial Department that the government

[54] ibid.
[55] Srilata Chatterjee, *Western Medicine and Colonial Society: Hospitals of Calcutta, c.1757-1860* (New Delhi: Primus Books, 2017), 155.
[56] File no. 3L/1, Municipal Department, Medical Branch, Pros. Nos. 4-51, October, 1893.

should provide financial aid to the institution as it had already contributed half a lakh of rupees for the assistance of hospitals of this town. Therefore, they were not in a position to support the institution entirely. For the maintenance of the Asylum and rebuilding of the wards, they were willing to grant a donation of Rs. 2,500 along with Rs.100 monthly subscription. The balances, required for building of the rest of the existing wards, should be provided either by government or by the District Charitable Society. Prior to this letter, the government asked both the District Charitable Society and the Justice of Peace for their opinion about the proposal of government undertaking of the Calcutta Leper Asylum. The District Charitable Society did not want to renounce the responsibility of the charge and maintenance of that institution immediately and could obtain the aid for the renewal of the building. The Lieutenant Governor of Bengal had provided a grant of Rs. 5,000 for the asylum buildings soon after.[57] It shows that the colonial state was more concerned about the management of the Calcutta Leper Asylum as it existed at the seat of the British Raj, and by acquiring this Asylum, the government would be able to observe the leprosy sufferers of the city.

In 1890s, the financial problems of the Asylum were proved to be a major impediment to the management for which the District Charitable Society had requested the government for more financial aid. [58] In these circumstances, the Leper Asylum Committee, formed in 1890, had submitted its report in 1893 concerning a new proposed site for the Asylum, the number of inmates, the constitution of the Governing Body, and rules of admission. The appearance of this report coincided with the publication of the report of the Leprosy Commission in India in 1890-91 where the idea of the hereditary transmission of the disease was discarded, but it conceded the

[57] WBSA, GOB, File 279, No. 1690B, General Department, Medical Branch, Pros. No. 17, August 1873, From Horace A. Cockrell, Esq, offg, Chairman of the Justice of the peace for the town of Calcutta to the Secretary to the Government of Bengal in the judicial Department.

[58] WBSA, GOB, File no. 3L/1, Municipal Department, Medical Branch, Proceedings 4-51, October 1893.

contagiousness of leprosy, though not in great extent. Nonetheless, the inferences that the Commission made in its report did influence the notion of the government about the 'lepers' in the city. There were 13 members in this Committee in which H. T Prinsep and Patrick McGuire were the President and the Secretary respectively, along with J. Lambert, H. Lee, W.J Simmons, Abdul Latif, Iswar Chandra Mitra, Surendranath Banerjee, W. Banks Gwyther, W. H Gregg, A. L Sandel, Amritanath Mitra, and R. Sen. The Committee of Management of the Albert Victor Leper Asylum was also formed. It was thought, reflected in the resolution of the 29th July, 1890 that the proposed Asylum should be on such a site:

"…at some distance from a dense population, which shall be wholesome and convenient for the unfortunate sufferers, and which at the same time shall not be sufficiently easy of access to tempt them to leave it readily."[59]

But, the Committee had opined that if the aim was to free the city from destitute 'lepers' then the institution must not be at considerable distance from the localities where the sufferers were mostly found. Meanwhile, the Calcutta Police Commissioner carried out a census to get an idea about the number of destitute 'lepers', i.e. approximately 365, in the city. Most of them were assembled in the northern part of the town. The figure induced the Committee to select either north or north-east of the city as the future site of the Asylum. However, there was another reason to take this site as ideal one. Some of the members were of the view that it would be extremely objectionable to erect the Leper Asylum on south or south-east side towards the direction of wind. It can be easily deduced from the beliefs of few members that the idea of miasma and its role in spreading the disease were still dominant in the medical as well as non-

[59] WBSA, GOB, File no. L/10, Judicial Department, Medical Branch, Pros. Nos. 1-12, December 1890, Foundation of a Leper Asylum in Calcutta; WBSA, GOB, File no. 3L/1, Municipal Department, Medical Branch, Pros. Nos. 4-51, October 1893, Report of the Leper Asylum Committee.

medical minds even at the last decade of the nineteenth century. Mr. Lambert found that ideal site would be at Kankurgachi situated under the jurisdiction of the Maniktala Municipality. The Asylum must have separate wards for female and male 'lepers' in the buildings which should be light, airy, single-storied structures with open wards and verandahs. In addition, the covered-in sheds must be provided to the inmates for taking meals and recreation.[60] In contrast to that, a separate building with a dining and reading rooms for the European and Eurasian 'lepers' had been proposed by the Committee. It seems that this racialization of treatments to the diseased appeared to be endorsed in the report. To the Asylum management, this 'unfortunate' group, who might or might not belong to the ordinary vagrant class, needed some special consideration. With the proposal of separating these two classes of 'lepers', the authority persistently had inhibited the European leprosy sufferers from any sort of socialization with the other 'native lepers'; a preemptive measure had been evoked to stall the contamination that would probably defile the 'white race' and its superiority. The Committee was wondering about the rules and regulations of the Asylum, however, the members unanimously decided that if the people with leprous sores were found begging or were in a state of destitution, they should be immediately sent to the Asylum until they were reported as cured. Regarding the seizure of destitute and vagrant lepers, there might be legal difficulties in enforcing them. Thus, the Calcutta Police Act, IV of 1866, section (70), was considered the best means which stated 'begging or applying for alms was a punishable offence with imprisonment with or without hard labor.'[61] The Committee thought if an adequate accommodation for the leprosy sufferers could be arranged in the Asylum then, with the penal lazaretto and the section of the Calcutta Police Act, the vagrant 'leper' population of

[60] WBSA, GOB, File no. 3L/1, Municipal Department, Medical Branch, Pros. Nos. 4-51, October 1893, Report of the Leper Asylum Committee.
[61] WBSA, GOB, File no. 3L/1, Municipal Department, Medical Branch, Pros. Nos. 4-51, October, 1893.

the city could come under proper organized control. It shows that the removal of 'lepers', which the Committee described as 'nuisance, from the streets, access roads, and public buildings', was the foremost concern of the elite society than offering them any relief. The mendicancy, which was already discerned as a form of occupation in the several large cities of colonial India, had become a habitual misdeed that leprosy sufferers gradually developed after being abandoned/ binned by their families. Surely to the urban elites, the issue had been to restrain the vagrant 'lepers' who tarnished the Victorian cityscape with their appearances.

"The question appears to the Committee more an administrative than a medical one, and until some statutory power exists to restrain vagrant lepers, the working of a leper asylum cannot be expected to be satisfactory."[62]

Not all officials were willing to give consent to the transfer of the Calcutta Leper Asylum to the proposed location at Maniktala Municipality. The Sanitary Commissioner of Bengal, W. H Gregg made the strongest objection on this removal scheme as the interest of Maniktala Municipality was largely ignored by the Committee in favor of the Calcutta Municipality Corporation (CMC). To him, the CMC had distributed filtered water-supply to Maniktala, therefore, the latter was expected to take burden of such 'objectionable institution' like a leper asylum in return. Gregg, although, had explained that the removal of the Asylum to the proposed area would be lumber to this municipality having no higher degree of sanitation that an asylum must require. This could be only possible by increasing the amount of tax in the municipality area which invariably would intensify the problems of tax-payers.[63]

[62] WBSA, GOB, File no. 3L/1, Municipal Department, Medical Branch, Pros. Nos. 4-51, October 1893, Report of the Leper Asylum Committee.

[63] ibid, Protest of the Sanitary Commissioner for Bengal against the proposed location of the Calcutta Leper Asylum in the Manicktollah Municipality by W.H Gregg, Sanitary Commissioner for Bengal.

The Committee did not hold this objection seriously, but the GOB wished to be convinced about the condition of the site before approving the proposal. The Lt. Governor of Bengal Charles Elliott, after looking into this matter, found that there was no such underground drainage at that proposed site and the system of surface drainage was also defective. He, then, requested the Committee to carefully think about any other alternative place under the CMC for the Asylum.[64] In these circumstances, J. Lambert, the Police Commissioner of Calcutta, had opined in favor of either retention of the Asylum or it must be shifted to the east of the city, especially the land lying between Upper Circular Road and the Canal. Meanwhile, the other proposals put forth by the Committee were approved. One such was that the institution should be under the government management with Governing Body of seven of whom four would be *ex-officio*, viz. the Inspector General of Civil Hospitals (President), the Secretary to the GOB, Medical, the Chairman of the Corporation of Calcutta, and the Commissioner of Police, Calcutta. Remaining members were selected from the Committee of the District Charitable Society and the Prince Albert Victor Memorial Fund.[65] On 16th May, 1893, a special meeting of the Executive Committee of the District Charitable Society was held at the Town Hall, Calcutta to discuss about the letter from the government regarding the transfer of the Leper Asylum. Finally, the members of the Society agreed unanimously on the government takeover of the Asylum. After a couple of months, the residents of the Amherst Street had sent a letter to the Lt. Governor in which they made an appeal to remove the Asylum as soon as possible. The reason was to impede the nuisance and the possible contagiousness of the disease what Asylum had been creating and endangering the lives

[64] WBSA, GOB, File no. 3L/1, Municipal Department, Medical Branch, Pros. No. 11, October, 1893, Report of the Leper Asylum Committee.
[65] WBSA, GOB, File no. 3L/1, Municipal Department, Medical Branch, Pros. Nos. 4-51, October, 1893, Report of the Leper Asylum Committee.

of the residents. Even, they expressed doubts concerning the findings of the Leprosy Commission:

"…the Leprosy Commission, which recently visited India, have doubts about the contagiousness of the disease; but your memorialists (the residents) submit that there are high Medical authorities who are of opinion that it is contagious and dangerous, and that in this state of uncertainty the Asylum ought not to be located in a thickly inhabited portion of the town."[66]

Babu Joygobinda Law had drawn the government's attention to this grievance and the Health Officer, W. J Simpson was equally aware of the problems that local residents were facing for years. When the Asylum had started its operation in 1830s, the population was less in the locality. Since then, the population had increased manifold, thus, the existence of any leper asylum in the densely populated area became highly objectionable to the local dwellers.

Therefore, in contrast to the proposal of Lt. Governor for continuing the institutional operation from the present site, the urban educated elite, especially the Bengali *bhadraloks*, were in favor of the removal of this Asylum, generating major 'health crises' in the vicinity. For example, Dr. Kailash Chandra Bose and Dr. Khirod Kumar Dutta were the renowned physicians of Calcutta who had raised serious objections against the retention of the Asylum at Amherst Street. A few prominent figures in the city, such as Kanai Lal Mukherjee, Upendra Nath Mitra, Ram Charan Mitra, Chandi Charan Biswas, Rajkrishna Banerjee, and Debendra Nath Ghose, had also supported the view.[67] The appeals, however, did fall short to persuade the government to change

[66] ibid, Proceedings of a Special Meeting of the Executive Committee held at the Town Hall on Tuesday, the 16th May 1893, to consider the letter from Government regarding the Transfer of Leper Asylum.
[67] WBSA, GOB, File no. 3L/1, Municipal Department, Medical Branch, Pros. Nos. 34-35, 1893, letter from Babu Joygobind Law to the Secretary to the Corporation of Calcutta, dated 14th June 1893.

its stance. On 1st August, 1893, an order from the Lt. Governor had been issued to retain the Asylum at the present site.[68]

While the Calcutta Leper Asylum had carried on its work at the Amherst street, the GOB was continuously in search of a new site that would be suitable for both the 'lepers' and the residents of Calcutta. It was decided to rename the new proposed asylum as 'Albert Victor Leper Asylum' in memory of Prince Albert Victor's visit.[69] [70] The colonial government had undertaken such program in order to keep the leprosy sufferers, especially the 'leper' beggars or the vagrants of the city, confined at the fringe of the cityscape, but within the municipality area, so that the institution could be frequently administered. The Lieutenant Governor had portrayed this matter in a different way. To him, the site must be within the jurisprudence of CMC, otherwise there would be legal obstacles to the contribution of funds by the Commissioners. Meanwhile, the President of the District Charitable Society requested the government to get relieved of the charge of maintaining this institution and asked the latter to be the stakeholder of the Asylum. Finally, the Subcommittee had selected a site near Gobra [now park circus] for the proposed asylum in 1894. The site was originally recommended for a tannery on the Park Circus Burial Road near Bridge no. 3 of the South-Eastern Railway. Moreover, this site had improved drainage system with filtered water supply. But the medical members of the Committee raised certain issues regarding the existence of 'Muhammadan Burial' at the west of the Asylum premises, and argued that the sub-soil water, chiefly the line of drainage extending from the burial ground to the old tannery, was supposed to be contaminated. The Committee had to look for another site

[68] ibid, letter from J.A Bourdillon, Secretary to the GOB, Municipal Department to the Chairman of the Corporation of Calcutta, dated 1st August, 1893.
[69] WBSA, GOB, File no. 3L/1, Municipal Department, Medical Branch, Pros. Nos. 34-35, 1893, ibid.
[70] Sir Surendranath Banerjea, *A Nation in Making: Being the Reminiscences of Fifty Years of Public Life* (Calcutta: Oxford University Press, 1927), 105-06.

comprising areas under *Punchanno Gram* survey which was in immediate vicinity of the previous site. It would take almost Rs. 34,000, out of which Rs. 10,000 was provided by the subscribers to the Prince Albert Victor Memorial, for the construction at the new Asylum. To the members of the Committee, removing the Asylum from Amherst Street to the new site largely proved to be invalid unless the resilient legislation was invoked.[71] T. H Hendley, the Inspector General of Bengal Civil Hospitals had emphasized the need of erecting a new shelter after visiting the Asylum at Amherst Street. For him, it was overcrowded and should not be called an 'Asylum' either. This institution had a shortened wall fencing all around, which could be easily traversed by the inmates at night. The only possible way to unravel this difficulty was to build a new asylum at the earliest:

"I have never seen such a terrible state of things in the whole course of my experience as an Inspecting Officer. The only cure is immediate action on the proposal to build a new Asylum and I hope a beginning will be made by putting up huts rather than buildings for the patients."[72]

There were altogether 119 leprosy affected persons in the Asylum in 1900, of which 9 were placed in the verandahs, dead-house, and godown due to the lack of space.

The Asylum was finally founded at the new site on 1st May, 1901 with improved accommodation and had started its operation under the Bengal Lepers Act, 1895. Later, the Lepers Act of 1898 was extended to Bengal along with the Albert Victor Leper Asylum and the 'lepers' from the following municipalities, i.e. "the Fort William, the Calcutta, the Cossipore-Chitpur, the Maniktala, the South-Suburban, the Tollygunge, the Garden Reach, and the Howrah

[71] WBSA, GOB, File no. 3L/3, Municipal Department, Medical Branch, Pros. Nos. 1-6, January 1895, Report of the President of the Committee for the Management of the Albert Victor Leper Asylum.
[72] WBSA, GOB, File no. M 3-L/4, Municipal Department, Medical Branch, Pros. Nos. 24-28, February, 1900, construction of building for the New Leper Asylum at Gobra.

Municipality", were sent to this government Institution.[73] Since May, 1901, the Calcutta police had arrested 11 'lepers' in the following year and they were immediately sent to the Asylum. The Committee of the Management of the Albert Victor Leper Asylum had decided to appoint the Superintendent of the Asylum as an Inspector of Lepers. However, the post did not get the government affirmation. H.M Kisch, the Secretary to the GOB, Municipal Department had clearly stated that the 'lepers' of the city would first be inspected by any of these 'Inspector of Lepers', i.e. the Police Surgeon, the Civil Surgeon of the 24-Parganas, the Superintendent of the Howrah General Hospital, the Resident Surgeon, Medical College Hospital, the Medical officer in charge of Fort William, the Health Officer of Calcutta, or the Health Officer of the Port of Calcutta. The lepers should be inspected by these men before taking them to Gobra.[74]

Nevertheless, this Asylum was known for its austerity. In 1905, the Leper Asylum Committee of Puri had sent a proposal to the Commissioner of the Orissa Division for providing the shelters to the homeless lepers at Puri. In it, the management of Albert Victor Leper Asylum, Gobra was criticized for erecting '*pucca*' buildings for the indigent 'lepers' of the Asylum as it seemed like a prison.[75] To the Committee, the primary objective of the Gobra Asylum was to protect the healthy community against leprosy sufferers of Calcutta, though, they failed to do so; since, only the indigent 'lepers' of the city were sent to the Asylum, whereas, the others suffering from this disease had not been taken care of. Even, there were frequent attempts to escape from the Asylum which showed that 'lepers consider their latter state to be worse than that of their first.'[76]

[73] WBSA, GOB, File no. 3L/7, Municipal Department, Medical Branch, Pros. No. 29, May, 1901, Extension of Lepers Act of 1898.
[74] WBSA, GOB, File no. 3-L/1, Municipal Department, Medical Branch, Pros. Nos. 20-23, October, 1901, Albert Victor Leper Asylum.
[75] OSA, GOB, File no. 3-L/5, Municipal Department, Medical Branch, Pros. Nos. A 12-14, April, 1905, Acc No. 12700, Leper Asylum at Puri.
[76] OSA, GOB, File no. 3-L/5, Municipal Department, Medical Branch, Pros. Nos. A 12-14, ibid.

Hence, the *pucca* buildings were supposed to be detrimental to the '*rights*' of the leprosy sufferers:

"…not only does a *pucca* building fail to secure the main object of its existence. The lepers don't want it. They have never lived in a *pucca* building in their lives and prefer privacy to stone walls and *pucca* floors."[77]

During 1920s, the standpoint of the Asylum management had been modified with the idea of medicalization, especially after the foundation of Calcutta School of Tropical Medicine (CSTM) in 1920. Treatments to the leprosy affected people had become more crucial than apprehending them. Besides this, the issue such as reorganizing the staff of the Asylum was taken into consideration in 1924. But still, the colonial state did have a stronghold over the Asylum administration at Gobra. In April, 1923, Professor Ernest Muir had drawn up a scheme for restructuring the staff of the institution in which he proposed for the substitution of the existing administrative Superintendent with a resident medical officer having exclusive knowledge on leprosy and also the discharge of the non-infective patients who were not under any treatment. The Committee had recommended Dr. E Landeman[78], who was suffering from leprosy, for the post of Superintendent. B. H Deare, the Surgeon General to the GOB had sent his disapproval to this substitution for two reasons. Firstly, a government post should only be filled up with a government officer. Previously, a Military Assistant Surgeon was appointed in the post of Superintendent of the Asylum. Thus, none but only a government officer would be employed in that place. Secondly, the Superintendentship could not be offered to anyone who contracted disease like leprosy. To Deare, it was inconceivable that a 'leper' [Dr. E. Landeman] was dealing

[77] ibid.
[78] WBSA, GOB, File no. 3L-7, Local-Self Government Department, Medical Branch, Pros. Nos. A 48-57, August, 1925, Reorganization of the staff of the Albert Victor Leper Asylum at Gobra.

with all the papers in the Asylum which might cause discontent amongst the inmates. This view was seconded by Kailash Chandra Bose and S. W Goode, the Secretary to the GOB and the Committee had finally nominated the Military Assistant Surgeon P. S Bedell, Junior Demonstrator of Practical Pharmacy, Calcutta Medical College, for the post.[79]

However, the colonial administration had no such doubt concerning the intervention of CSTM in the medical treatments provided to the inmates of the Asylum. Kailash Chandra Bose felt the necessity for relying on the CSTM as regards to the new medications. It appears that the colonial state was only taking the matters related to 'supervision over the lepers' into account, associated with the 'law and order' issue of the city, while leaving the medical concerns to the research institute.[80] The Police Commissioner sought to be relieved from the post of the President of the Committee and sent a letter to the GOB in 1925. Charles Tegart, the Commissioner of Police was of the opinion that the Asylum was no longer a penal settlement which needed the assistance of police to arrest the 'lepers' and detain in the Asylum. The priority had been changed from obtaining inmates by compulsion to offer treatments to the leprosy sufferers of the institution:

"the management of the asylum has during the past year, involved a very considerable amount of work on me in particular and on my department in general, this work is largely connected with technical questions which fall more correctly within the purview of the medical rather than the police sphere of duty."[81]

As the problem had become a purely medical one than a police affair, Tegart had appealed to the government for reconstituting the Committee and appointing the Surgeon General of GOB in the

[79] ibid.
[80] File no. 3L-7, Pros. Nos. A 48-57, Local-Self Government Department, Medical Branch, August, 1925.
[81] WBSA, GOB, File no. 3L-19, Pros. Nos. A 12-21, Local-Self Government Department, Medical Branch, appointment of the Commissioner of the Presidency Division as Chairman of the Board of Management for the Albert Victor Leper Asylum for Lepers and of the Police Surgeon as a member of the said Board and amendment of the rules of the Institution, April 1926.

executive charge of the Asylum as the President of the Board of Management. The GOB, after carefully considering the proposal, had concluded that the executive or administrative duties performed by the Police Commissioner did not necessarily require 'medical knowledge'; it stated that what Tegart said about the changing perspective of Albert Victor Leper Asylum towards the inmates was true. Nonetheless, as far as the medical knowledge was concerned, Dr. Muir or any IMS officer could lend their hands. On 8th March, 1926 in a notification, the GOB had appointed the Commissioner of the Presidency Division as the Chairman of the Board of Management for the Asylum and roped the Police Surgeon in the Board. [82] Meanwhile, the number of 'leper beggars' in Calcutta had significantly increased during 1920s and 1930s; so the GOB was not willing to pull out the police supervision over the 'leper' mendicants of the city completely. Furthermore, the proposal for erecting a separate '*hindu*' ward had been put forward by the Marwari community of Calcutta in 1928. Such request, to build a house solely meant for *hindu* leprosy patients, might have engendered a communal strain amongst the inmates, mainly, the *muslim* patients who did not have any separate ward so far. Babu Tularam Goenka of Messrs. Sadhuram Tularam of No. 9, Jagomohon Mullick's street, Calcutta, had donated Rs. 50,000 for the construction of a ward for *hindu* 'leper' patients in the Albert Victor Leper Asylum provided that the ward should be named as '*Sadhuram Goenka Hindu Lepers Hospital*'. It should be maintained with strictly orthodox '*hindu*' style as regards to food, diet, drink, lodging etc. and none of the materials like meat, fish, and 'objectionable drinks' would be allowed in the premises of that ward. Even, only Marwari '*brahmin*' cooks could be engaged, so that all other '*hindu*' patients would not have any problem in taking meal from them. [83] The Committee

[82] WBSA, GOB, File no. 3L-19, Local-Self Government Department, Medical Branch, Pros. Nos. A 12-21, ibid.
[83]WBSA, GOB, File no. 3L-2, Local-Self Government Department, Medical Branch, Construction of a Ward for Hindu Lepers in the Albert Victor Leper Asylum, Gobra, Pros. Nos. A 5-10, January, 1929.

ultimately endorsed this proposal without caring about the '*muslim'* patients who had been sharing the wards with their fellow inmates from early nineteenth century devoid of any objection. In this context, the religious identity of a sufferer, to a great extent, had wrecked the patients' solidarity which was formerly perceived as a uniform 'diseased class'. The colonial governance intended to create a rift within the leprosy sufferers of the Asylum in order to avert the patients' unrests which happened to be a frequent occurrence in the leper asylums of south India during 1920s.[84]

Since the early 1930s, the officials pleaded for converting this Government Asylum into the Trust Institution. Due to the financial difficulties, the GOB was eager to entrust the pecuniary affairs over a board of management in which a government official might work as representative of the government. To J.G Drummond, the Commissioner of the Presidency Division, this crisis would be resolved by giving semi-autonomy to a hospital like the Calcutta Hospital Nurses Institution which was under the trifling control of government offering a fixed sum every year as grant. Later on, F.W Robertson, appointed in the place of Drummond, agreed with the proposal of lesser government intervention in the Asylum management. Such system might ensure the self-rule of an institution and reduce the government responsibilities required for the development of the Asylum. The officials were now asking for a new Act through which this 'Asylum' had to be transformed into a hospital for the sufferers, although, this institution would not in any case be taken out of the Lepers Act of 1898. In 1931, C. W Gurner, the Secretary to the GOB, Local Self-Government Department, had requested the Legislative Department to draft a bill:

[84] Sanjiv Kakar, "Medical Developments and Patient Unrest in the Leprosy Asylum, 1860 to 1940," *Social Scientist* 24, no. 4/6 (Apr-Jun, 1996): 62-81.

"…for the incorporation of trustees for the Albert Victor Leper Hospital at Gobra and the vesting of the hospital, including the site and trust funds attached to the hospital, in the said trustees."[85] To the GOB, this bill should be outlined with regard to the Ranchi Mental Hospital Act, 1922. In addition to that, the Board of Trustees should conduct the institution under the Lepers Act of 1898 and carry out programs for the treatment of leprosy sufferers accordingly. [86] Before introducing the Bill in the February Session of the Bengal Legislative Council in 1935, the government sought to know the opinion of the CMC about the Bill. Therefore, a meeting was held by the Public Health Standing Committee of CMC on 17th January, 1935 in which Dr. K. S Ray and Babu Bhupendranath Banerjee had opposed the Bill and found little reason in setting forth the Act. They were not convinced about why this legislation was seen to be necessary for this institution. The Lepers Act of 1898 had armed the government with immense power that should be judiciously exercised rather than bringing in the Trusteeship. In reply to this, Gurner had explained that the proposed bill was necessary to remove the predicaments in obtaining the financial supports for the Leprosy Asylum due to the existence of various trust funds and their difficulties of adjustment with government expenditure, although, the Committee approved the government decision on the Albert Victor Leper Hospital Bill, 1934. The Act was passed in May, 1935, with meager alterations and the Board of Trustees, consisting of the Commissioner of the Presidency Division, the District Magistrate of the 24 Parganas, the Director of Public Health, Bengal, the Executive Engineer of the Second Calcutta Division, the Health Officer of the Corporation of Calcutta, two Trustees from the CMC, seven other Trustees appointed by the Local Government, and one representative from the British Empire Leprosy Relief Association

[85] WBSA, GOB, File no. 2L-23, Local-Self Government Department, Medical Branch, Pros. Nos. A 12-16, October, 1931, Conversion of the Albert Victor Leper Hospital, Gobra, into a Trust Institution.
[86] File no. 2L-23, Local-Self Government Department, Medical Branch, Pros. Nos. A 12-16, October, 1931, ibid.

(BELRA), would hereby assume the charge of the management of the Leprosy Hospital, formerly known as 'Asylum'.[87] However, the government recurrently lent a hand to the hospital with fixed financial aid every year.

In 1940s, the political equation was rapidly changing with the mounting communal politics. This, in due course, culminated into a rampage that created an environment of decimation. The management of the Albert Victor Leper Hospital, Gobra was facing problems in running the institution as it came to be under communal threat during October, 1946. A.S Hands, the Commissioner of Presidency Division and Chairman of the Board of Trustees, had sent a report to the Secretary to the GOB informing about the assault by a group of '*muslims'* on the quarters of the Superintendent Dr. Chakravarty, and the medical officer Dr. Chatterjee on the night of the 28th October, 1946.[88] On Mr. Hands's request, the police from Lalbazar had arrived to rescue the residents of the Leper Hospital quarters which were attacked from three sides of the compound. Dr. Chatterjee managed to keep off these strikes by using his gun, but the Superintendent along with the three staffs had been severely injured by groups of assailants. The police, reached at time, had opened fire to disperse the mob and remained there for the rest of the night. Hands wanted an armed police picket on those quarters with adequate transportation to collect daily rations, vegetables, and milk required for the Hospital. During the communal disturbance, there were 250 leprosy sufferers in the institution taken care of by Dr. Chatterjee in absence of the Superintendent. As the hospital was in '*muslim'* dominated area which had been infamous for frequent violence, Mr. Hands had asked the government for a '*muslim'* Superintendent for the

[87] WBSA, GOB, File no. 2L-10, Local-Self Government Department, Medical Branch, Pros. Nos. 53- 71, June, 1935, Albert Victor Leper Hospital Act.

[88] WBSA, GOB, File no. 2L-9, Health and Local-Self Government Department, Medical Branch, Pros. Nos. B 7-15, December, 1947, Notes and Orders regarding proposal for posting of armed picket, arrangement for the transport of the hospital staff and removal of the hospital site from its present site of the Albert Victor Leper Hospital, Gobra, due to communal riot.

institution and secondly, an armed transport should be arranged for the '*hindu'* staffs living in Chetla and Sealdah area in order to provide safe passage between their home and workplace.

"The present position is that the hindu employees in the hospital cannot go out for fear of being murdered, and those who live in other places dare not approach the hospital for the same reason. The result is that without armed transport supplies cannot be obtained and hospital employees cannot go to and fro to their work at the hospital."[89]

In this situation, the GOB had no other option except advising the Trustee to look for alternative site and place for the institution, but the government clearly avowed that it was not in a position to provide alternative accommodation at present. However, these kind of attacks persisted despite of police picketing and the patients and staffs of the hospital were naturally traumatized. Finally, the Secretary of GOB replied that the removal of the hospital to another site seemed redundant. Not only was that impracticable, to him, there was no such locality free of Hindus or Muslims where the Asylum could be transferred. If it was shifted to a locality inhabited by '*hindus'*, the '*muslim'* employees and physicians would oppose to work or the other way around. Moreover, this political unrest would not remain forever; the other managements, although, did not think of relocating the institutions. For example, the Chittaranjan Hospital, which was situated in the Park Circus region, or even the Ballygunge Government High School had not requested the government about the removal of the set up.[90] Therefore, this proposal eventually had been rejected by the GOB. The post-independent government had initiated a program to control the spread of leprosy in India, named National Leprosy Control Program (NLCP) in 1955. The research workers of CSTM, since 1940s, had extensively worked on leprosy

[89] WBSA, GOB, File no. 2L-9, Health and Local-Self Government Department, Medical Branch, Pros. Nos. B 7-15, December, 1947, ibid.
[90] File no. 2L-9, Health and Local-Self Government Department, Medical Branch, Pros. Nos. B 7-15, December, 1947.

prevention that ultimately induced the government to outline the newer public health policies focusing on the Propaganda, Treatment, and Survey (P.T.S) method. Thus, the directives of public health were changed from confining the diseased to medicalizing the maladies. For which, the existence of any asylum was no longer needed. The Albert Victor Leper Hospital (Abolition) Act was passed in 1956 and the Board of Trustees had been dissolved by repealing the previous Albert Victor Leper Hospital Act, 1935. This Act was put into effect from the 1st November, 1956. All funds and other properties of the Hospital, after the commencement of this Act, had to be transferred to the West Bengal State Government. The funds, however, could be used by the State Government for the prevention, treatment or relief of or for the research work on leprosy.[91]

'Care' with Cure: the Works of 'Mission to Lepers' and the Church Missionary Society in Bengal

The 'care' with its assiduity appeared to have been entangled with the pervasive nature of colonial laws. The laws tried to bring uniformity in the ideas of caring for the 'leper' inmates in the asylums of British India. The political solemnity of 'religious' credence, what Mission to Lepers carefully refurbished in a way in which the other missionary organizations did in India, should not only be identified with the British politics but would it be contextualized in the imperial politics of the Raj. Scholars have pointed out that this 'Missionary Imperialism' had reconsidered the late imperial history with the British religious fervors which were influenced by Christian belief entrenched both in the British past and the ramified imperial ideology.[92] Through the process of reconstruction, the 'identities' were constructed in the course of horizontal and

[91] See *Albert Victor Leper Hospital (Abolition) Act, 1956.*
[92] Gerald Studdert-Kennedy, *Providence and the Raj: Imperial Mission and Missionary Imperialism* (New Delhi: Sage publications, 1998), 1-5.

vertical conflict of religious discourse.[93] The Mission to lepers had performed this sacred duty of making complaints to the Raj in a secular framework, although, they mostly relied on the spiritual aphorism that ultimately guided their methodology of 'care'. It was essentially '*Christian*', having the aim to convert the 'lepers' into the pronounced faith of Christ, with '*philanthropic*' ideals to shelter the homeless 'lepers'; simultaneously, there would be both '*preventive'* and '*medical*' concerns within the domain of ministration to segregate the 'worst and most dangerous cases' of the disease and to put the sufferers under the supervision of both European and indigenous doctors in the asylums.[94] This organization was founded in 1874 after Bailey's visit to the leprosy sufferers at Ambala and Ludhiana. The Bailey couple returned to India in November, 1874 and settled in Chamba in early 1875. In 1880s, the organization was expanding its work almost in each province of the Raj.

The Gossner's Mission came into contact with the Mission to Lepers in 1883 when both Rev. F. Hahn[95] and Rev. Heinrich Uffmann,[96] the Superintendents of Lohardaga and Purulia Asylum respectively appealed to the organization for financial assistance. Initially, the Purulia Leper Asylum, established in 1884, started its work from the site closer to the Mission premises and within the municipality boundaries. Due to the spatial inadequacy, the site was not able to accommodate the increasing influx of leprosy sufferers from Manbhum. It was then decided to

[93] ibid, 1-5.

[94] D.G Joseph, ""Essentially Christian, eminently philanthropic": The Mission to Lepers in British India," *Historia Ciencias Saude-Manguinhos* 10, supplement 1(February, 2003): 247-75; A. Donald Miller, *An Inn Called Welcome: The Story of the Mission to Lepers, 1874-1917* (London: Mission to Lepers, 1965); John Jackson, *Lepers: Thirty-One Years' work among them being the history of the Mission to Lepers in India and the East, 1874-1905* (London: Marshall Brothers, 1906), 87.

[95] Rev. Karl Heinrich Ferdinand Hahn (1846-1910) was a German missionary who translated bible into Kurukh language. The Kurukh or Oraon people are Dravidian speaking ethnic group inhabiting mostly in Jharkhand, Odisha, Chattisgarh and West Bengal. Hahn worked extensively amongst the leprosy communities in Ranchi, Chaibassa, Purulia and Lohardaga for which he was awarded with the Kaiser-E-Hind by the British Government.

[96] Rev. Heinrich Uffmann, a Missionary for the German Evangelical Lutheran Mission, known as Gossner's Mission, opened the Leprosy Asylum at Purulia in 1884.

shift the Asylum on an open elevated land about 200 bighas, outside the municipality area. The site had been purchased on behalf of the Leper Mission Trust Association for the sum of Rs. 800 including the lands acquired for the purpose of giving shelters to the untainted children. Besides this, the site had a good deal of arable land part of which had been brought under cultivation.[97] The first grant to the Asylum was made in 1887 shortly before the Mission to Lepers had undertaken the financial responsibility of the institution. During the stone-laying ceremony of the Asylum, the Secretary of Gossner's Mission, Rev. Prof. Plath had welcomed such cooperation between the German and British Mission in association with the *natives*:

"You English and we Germans-join hands and begin this philanthropic work. From Great Britain comes the money, Berlin gives the men, and a native gentleman (a zamindar, or landowner) has given this piece of ground for the buildings."[98]

In 1888, the Purulia Asylum admitted 67 sufferers, but Mr. Uffmann was pleading for permission to allow 100 'lepers' from the district. Under his ministry, almost 1200 'lepers' were baptized in the late decades of nineteenth century. At the end of 1904, there were 611 leprosy sufferers in the Asylum embraced Christianity. To them, this was the greater system of ethics more than a new credo.[99] Therefore, the religious leanings of the missionary service had typified the concept of 'hope' manifested through the sufferings of the leprosy patients. The declaration, that the diseased state of a sufferer could only be eliminated by ensuring the principles of Christian gospels, was a kind of narrative serving the purpose of colonial governance to promulgate the immanency of doctrinal placebo. That particular feature made the missionary

[97] WBSA, GOB, File no. 3L/18, Municipal Department, Medical Branch, Pros. Nos. 18-21, June 1908, Leper Conference.
[98] John Jackson, *In Leper- Land: A Record of 7,000 miles among Indian Lepers, with a glimpse of Hawaii, Japan, and China* (London: The Mission to Lepers, 1911), 57.
[99] John Jackson, *Lepers: Thirty-One Years' work among them*, 87- 91.

asylums different from that of the government asylums. So far the Bailey's account is concerned, 19 'lepers' had been baptized in the Asylum, in 1890, among which four were women. [100] According to the Annual Report of Mission to Lepers of 1894, the Purulia Asylum had 300 inmates so far.[101]

The works of the organization, including the Christian teachings offered to the inmates, were highly acclaimed by the government as well. Sir John Woodburn, the then Lieutenant Governor of Bengal, was impressed by the arrangements made for the sufferers in the Asylum. Such ideal place exerted a pull on the homeless wanderers from distant areas in later years.[102] Nearly 478 inmates including 'female lepers', among 639 leprosy sufferers, had been converted into Christianity in the Asylum from 1888 to 1895.[103] The figures had definitely pointed towards the existing social ethos in which the leprosy sufferers, often abandoned by their family, had no other alternative but to accept the faith in order to get the treatment and shelter in the Asylum. Only in 1898, almost 77 sufferers were baptized on Christmas Day which had been further mounted to 149 next year. The Mission to Lepers had considered this as success and an 'unparalleled event'. To the Asylum authority, this was supposed to be the example of spontaneity of the inmates affirming to Christianity without any proselytizing pressure. Even, the representatives of the other missionary societies were much glad to witness the satisfactory body of converts in the Purulia which was unique in itself. The supposition, that conversion was in practice-at-will, needed affirmation from the outsiders [the other missionary figures] who would correspond that fact.

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[100] Wellesley C. Bailey, *The Lepers of Our Indian Empire: A Visit to them in 1890-91* (London: John F. Shaw and Co., 1891), 122-128.
[101] See *the Twentieth Annual Report of the Mission to Lepers in India and the East for the year 1894* (London: John F. Shaw and Co., 1895), 15.
[102] WBSA, GOB, File no. 3L/18, Municipal Department, Medical Branch, Pros. Nos. 18-21, June 1908, Leper Conference.
[103] Julius Richter, *A History of Missions in India* (New York: Fleming H. Revell Company, 1908), 364.

In 1900, a new church in the premises was opened for the inmates. After the death of Rev. Uffmann, the new Superintendent Rev. Ferdinand Hahn took over the charge of the Asylum. The Mission to Lepers was always eager to work with the directives set by the colonial state concerning the leprosy sufferers. Thus, the Lepers Act of 1898 was extended to most of the asylums, cities, and municipalities in the name of 'care', although, it had eventually institutionalized the power of colonial state over the leprosy populace. On 28th October, 1902, F. A Slacke, the Commissioner of the Chota Nagpur replied to the questions asked by the Secretary to the GOB, Municipal Department about the accommodation, the amount of the government capitation grant and the additional buildings required to house the sufferers. The GOB had expressed its willingness to bring the Purulia Asylum under the Lepers Act, but, the institution ought to have more buildings. In 1902, GOB had issued a couple of notifications through which a part of the Purulia Leper Asylum was put under the Lepers Act, 1898 and the 'lepers' from Manbhum district were to be sent to this institution. With this notification, the Asylum had constituted a board in which the representatives of both these organizations, i.e. Mr. T. A Bailey, the Honorary Organizing Secretary to the Mission to Lepers in India and the East and Rev. A. Notrott, the President of the Vorstand of the German Evangelical Lutheran Mission, were appointed as members.[104] When the Magistrate sent a leper to the Asylum under section (8) of the Act, he should enclose the warrant of detention containing the following information such as name, father's name, age, height, sex, caste or religion, place of abode occupation, family history, and list of property sent with the 'leper'. The Superintendent would be responsible for carrying out all rules and orders related to the maintenance of the Asylum. In extraordinary circumstances like the escapes or breaches of discipline among the sufferers admitted under the

[104] OSA, GOB, File no. 3-L/5, Municipal Department, Medical Branch, Pros. Nos. A 21-30, November, 1902, Acc. No. 12523, Purulia Leper Asylum.

Act, and all unforeseen deaths, outbreaks of epidemic diseases or the measures undertaken to foil the spread of such diseases, the Superintendent should report to the President at the earliest. If a 'leper' escaped from the asylum, the Superintendent should forward a report with a description of that 'leper' to the officer-in-charge of the police station, so that the police could intercept the escapee. Every 'leper', admitted under the Act, should be provided necessary facilities including the free exercise of his religion and no sort of difference in treatment should be made between Christians and non-Christians. The Superintendent could punish the inmates at his discretion for the breach of discipline, but that was subject to the Board's approval. Such secular way of governance with a perfect blend of coercion and persuasion had become the model to the Raj for reining the 'lepers' in. It shows that the Raj would never seek to hegemonize the stakeout over the movements of the 'lepers' without the consent of the missionaries. On 15th November, 1902, H. C Woodman, the Under-Secretary to the GOB had sent the sanction of the government to the Commissioner of the Chota Nagpur Division for constructing two additional blocks for male 'lepers' and one for females in the Purulia Asylum.[105]

In spite of such 'righteous' cooperation, the government was still skeptical about the figures of inmates in the Asylum and asked for the right data. There were numerous persons in the institution not having open sores or ulcers; therefore, according to the section 2(1) of the Lepers Act, 1898 those people should not be regarded as 'leper'. In reality, the GOB sought to put a ceiling on the grant which now would be used only for those were at the ulcerated stage in Purulia. T. A Bailey, the Honorary Organizing Secretary for India, Mission to Lepers, had corresponded with E. A Gait in 1905 about the issues and explained that the large number of tubercular cases in the Asylum were far more helpless and equally a source of danger to the

[105] File no. 3-L/5, Municipal Department, Medical Branch, Pros. Nos. A 21-30, November, 1902, Acc. No. 12523.

general public. So, they must have been treated as serious cases in the Asylum. Besides this, Bailey had also requested capitation grant for the Asylum.

Another letter was sent to Sir Andrew Fraser, the Lieutenant Governor of Bengal in which Bailey clarified the standpoint of the Mission. Due to the depression in trade in India, the organization experienced difficulties to raise the funds by public subscription.[106] Without the government aid, the necessary works could not be carried out. Thus, Bailey had appealed for an increase of the capitation grant to the Asylum for almost 600 inmates, although, the GOB was unable to agree with such a proposal as the amount had been fixed previously for a period of three years:

"The Lt. Governor has considered the request of the Mission to Lepers that the grant to the asylum at Purulia should be increased, but regrets that he cannot accede to it. The amount of the grant was fixed for a definite period with due regard to all circumstances of the case, and it is too soon to reopen the question. Govt. will however be prepared to reconsider the matter when three years period is about to expire."[107]

The colonial government in 1910 continued to provide grants, around Rs. 12,000, to Purulia for the maintenance of 500 'lepers' which was fixed at an equivalent to a capitation grant of Rs.2 per head in a month.[108] However, the sum was considerably curtailed by Rs. 3 in comparison to the requested government grant in 1902 when the average contribution to the sufferers would be expected at Rs. 5 per head. In 1913, the number of leprosy sufferers increased to 714 in the Asylum, out of which 291 were male, 301 were female, 75 were children, and 47 were untainted

[106] OSA, GOB, File no. 3-L/5, Municipal Department, Medical Branch, Pros. Nos. A 50-54, February, 1906, Acc No. 12768, Grants to Leper Asylum.
[107] WBSA, GOB, File no. 3-L/5, Municipal Department, Medical Branch, Pros. Nos. A 50-54, February, 1906, Grants to Leper Asylum.
[108] OSA, GOB, File no. 3-L/8-1, Municipal Department, Medical Branch, Pros. No. 29, January, 1910, Acc. No. 13221, Capitation Grant to the Purulia Leper Asylum.

children. Amongst them, almost 111 had been baptized out of 627 Christians.[109] The Mission to Lepers was not the lonely mover, the Church Missionary Society (CMS), founded in 1799, also played a pivotal role in 'caring' for the leprosy sufferers in British India. In the early years of the First World War, the GOI had asked the CMS to send a mission to Purulia for carrying out the works which were previously done by German missionaries.[110] As Germany was the member of 'Triple Alliance' since 1882 and had become the enemy of Britain during war, the British government, with the help of CMS, was supposed to take possession of the asylum managements which were under the influence of either the German government or the missionaries. Its annual reports and organizational periodical '*the Mission Hospital*' had published the works and progress of the CMS in different countries including the Raj. According to one of the reports, there were 537 sufferers undergoing the treatment in the Purulia hospital in 1925 out of which 68 were baptized.[111] The figures had declined considerably due to the transfer of the 'lepers' to other asylums, i.e. Bankura and Raniganj, reducing the burden of the Purulia Asylum which was getting overcrowded for many years. During rainy seasons, there were about 150 women, men, and children who needed daily treatments, but the numbers were fairly less in the summer.[112] Moreover, the Mission to Lepers and the CMS had stressed on the treatment of the sufferers in the asylums due to the development in disease diagnosis.

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[109] NAI, GOI, Pros. 148, DGIMS Department, General Branch, June, 1914, the 39th Annual Report of the Mission to Lepers for the Year 1913.

[110] See *CMS Awake!* 30, issue 348 (London: Church Missionary Society, 1920), 69-70. Available through: Adam Matthew, Marlborough, Church Missionary Society Periodicals, http://www.churchmissionarysociety.amdigital.co.uk/Documents/Details/CMS_CRL_Awake_1920_09[Accessed June 21, 2019].

[111] See *The Mission Hospital* 31, issue 348 (London: Church Missionary Society, 1927), 12-13. Available through: Adam Matthew, Marlborough, Church Missionary Society Periodicals, http://www.churchmissionarysociety.amdigital.co.uk/Documents/Details/CMS_CRL_Mission_1927_01 [Accessed June 16, 2019].

[112] See *Annual Report of the Church Missionary Society* (London: Church Missionary Society, 1926), 245. Available through: Adam Matthew, Marlborough, Church Missionary Society Periodicals, http://www.churchmissionarysociety.amdigital.co.uk/Documents/Details/CMS_CRL_Annual_Report_1926-1927_01 [Accessed June 18, 2019].

While changing their maneuvering with regard to regulating the leprosy population, the missionary organizations seemed to be more persuasive in dealing with the 'lepers' who were now seen not as sufferers but as medically evangelized. More out-patients were treated in the missionary asylums. For example, the number of major operations had increased in the outdoor of Purulia Asylum during 1931; there were 16 nurses in the Hospital attending the dispensary to give injections to the leprosy sufferers and performing the role of spreading the gospels of Christ which they had been assigned for. The gospels appeared 'to make' them 'a very good evangelistic worker' anyway.[113] Sister Thornton was the ideal figure defined as the friend of wretched amongst the leprosy inmates. Rev. E. B Sharpe had evaluated her five years' of service in the Purulia station with a note:

"she began work cleaning leprotic ulcers under a tree… when she left us…(proper dressing stations) had been organized and leper patients trained as nurses and the relief of our inmates only Eternity will show. Again and again her tireless persistence and devotion to duty saved life after operations. Often she spent the night in a deck chair in the leper hospitals in case emergencies arose…an unheard of thing prior to her advent. Welfare work in the Christian village near the leper colony also constantly engaged her time, and children are alive today who had no chance at birth but for her patient skill."[114]

Sharpe was not doubtful towards the Indian doctors who were religiously doing their duties, but still he preferred to think that the task of Europeans was only to guide them. The colonial tutelage which shaped the discourse of power in the Raj, after all, persuaded the missionary

[113] See *Annual Report of the Church Missionary Society* (London: Church Missionary Society, 1931), 247- 264. Available through: Adam Matthew, Marlborough, Church Missionary Society Periodicals,http://www.churchmissionarysociety.amdigital.co.uk/Documents/Details/CMS_CRL_Annual_Report_1931-1932_01 [Accessed June 16, 2019].

[114] ibid.

ardor. The pressure of 'leper beggars' was intensified so much that the management had thought about constructing a special home for them. In May, 1937, the Purulia Leprosy Relief Association, which was founded a year before, had opened the Leper Home intended primarily for 'leper beggars'. This dwelling seemed to lessen the stress of the applicants to the older hospital. Within a short period, around 200 patients were admitted to the Home.[115] The *Naba-Kustha-Nibas* or this new Leper Home was later jointly administered by the Committee having the members from the Manbhum District Board and Purulia Municipality.[116] The Purulia Asylum and Hospital continued its work amongst the leprosy sufferers. Due to financial constraint, there was a reduction in staff in the institution and allowances given to the patients in 1940. Also the problem of obtaining regular attendance of patients was mentioned in the Annual Reports of the Mission.[117]

After independence, the institution was more inclined to get the newer medical treatments in leprosy by completely transforming the asylum into a 'hospital'. In the 1950s, Dr. Paul Brand had initiated reconstructive surgery for leprosy patients in the Purulia Hospital and the physicians, nurses, and physiotherapists of the institution had been trained in this surgery in 1954.[118] Though the shift towards hospitalizing the leprosy sufferers of the asylums had taken place in the early 1930s, this changing perception, however, was compatible with the ideas of revolutionizing the impoverished and diseased colonized state into a 'Healthy Nation' which had

[115] See *The Mission Hospital* 42, issue 488 (London: Church Missionary Society, 1938), 246-47. Available through: Adam Matthew, Marlborough, Church Missionary Society Periodicals, http://www.churchmissionarysociety.amdigital.co.uk/Documents/Details/CMS_CRL_Mission_1938_09 [Accessed June 11, 2019].

[116] See *Leprosy in India* 17, no. 2 (April, 1945): 189.

[117] See *Leprosy in India* (July, 1941): 114.

[118] Dr. Paul Brand, who was a renowned orthopedic specialist and leprosy surgeon, was born in 1914 and spent his early years in the southwest India. He found an effective treatment of deformity caused by leprosy while treating the polio-paralyzed and war injured soldiers during Second World War. In the late 1940s, he became the first surgeon in the world using reconstructive surgery in diagnosing deformities. In 1953, he joined with the Leprosy Mission and from 1993 to 1999 he was the President of the Leprosy Mission International.

been often promulgated by Indian National Congress (INC) during its anti-colonial struggle. The Gandhian Constructive Program had dealt with the issues regarding the sufferings of 'lepers' in the asylums, although, the nationalist narratives on 'health' fairly leaned over the notion of sanctifying only the body not the sufferers. It appears that the 'christened' influence, embodying the care to the miserable in the British Empire from the nineteenth century as essential requirement of valorizing 'Evangelism', affected the nationalist spirit of manifesting the subjects as pure and healthy.

Another asylum, situated at Lohardaga, was under the management of the German Mission. The Superintendent formerly had been Rev. Mr. Hahn, but soon Rev. Mr. Gemsky took over the charge of the institution. In 1894, the institution had 21 inmates including 17 aborigines with two *Goraits* and two *Ahirs*. Most of the inmates, except five patients, had embraced Christianity. During the framing of Bengal Lepers Act, 1895, the Commissioner of the Chota Nagpur Division, W. H Grimley did give his consent to put the Lohardaga Leper Asylum under the Lepers Act.[119]

A similar scheme was proposed for Muzaffarpur Leper Asylum. The GOB wanted to implement the Lepers Act at Muzaffarpur Leper Asylum. In 1909, H.C Woodman, the District Magistrate of Muzaffarpur had sent a letter to the Commissioner of Tirhut Division while recommending the necessity to extend the Lepers Act at the district. There were 766 leprosy sufferers in Muzaffarpur according to the census of 1901. To Woodman, for the time being, the considerable amount of 'nuisance' and 'annoyance', caused by the 'lepers' amongst the public, had been checked by section 34 (7) of the Police Act. This resulted in the rise of inmates; most of them were pauper 'lepers', in the Leper Asylum which induced the government to send total grants of

[119] OSA, GOB, File no. 3L/5, Municipal Department, Medical Branch, Pros. Nos. A 40-49, December, 1895, Acc. No. 12152, Leper Asylum at Lohardaga.

Rs. 4,000 in 1907 for the construction of new wards to accommodate these 'lepers'. Even, the Superintendent of the Asylum and the Mission to Lepers had no objection to the proposed extension. Finally, the institution came under the Act in 1909, but Woodman expressed his resentment concerning the government decision of putting only a part of the Asylum under the Act. To him, it would generate a differentiation, in terms of providing treatment, amongst the voluntary inmates of the Asylum and the 'lepers' who were admitted under the Act. At Purulia, this scheme proved to be a failure as the sufferers preferred to go with 'voluntary' isolation rather than being treated under compulsion. This move would make this institute unpopular and 'hamper the good work of the Asylum'.[120]

Apart from the missionaries, the local distinguished people also came forward to build asylums for the leprosy sufferers along with the governmental support. E. F Growse, the Commissioner of the Orissa Division had informed E.A Gait, the Secretary to the GOB, Municipal Department, about the scheme of the Leper Asylum Committee of Puri consisting of J. R Blackwood, as the District Magistrate and President; Babu Sarat Chandra Rai, as the Secretary; Babu Jagabandhu Patnaik and Babu Rajkishore Das, as members. The proposal was originally intended for building an asylum, but later on this had been modified to provide the sufferers only with free house accommodation and food with the assistance of private donations. The management of the institution would be vested on a committee of District Magistrate, Munsif (Secretary), the Temple Manager (member) and the Special Sub-Register (member). At Puri, there were at least 38 'lepers' in 1904 having no residence. They had been reported to be located in places like Lokenath Ghat, Markond Road, Singdwar, Gundicha Mandir Garden, and on the bank of Narendra Tank. The sufferers were fed on *mahaprasad* (food offerings) provided free by

[120] OSA, GOB, File no. 3-L/5, Municipal Department, Medical Branch, Pros. Nos. 84-96, July, 1909, Acc no. 13149, Muzaffarpur Leper Asylum.

different *maths* (monasteries) in the town. The purpose was to 'confine' the indigent and homeless 'lepers' in a place, near *lokenath* temple,[121] so that the dismays, which 'leper' beggars created amongst the public, could be stalled.[122] The Committee mostly depended on charitable donations from the numerous pilgrims visiting Puri and the contribution from a few notable figures like Babu Radha Charan Das, the zamindar of Balasore, who had donated 207-5-4 per annum for the Asylum. This endowment was known as the Raj Narayan Das Endowment. In 1908, Kumar Rameswar Malia offered Rs. 2,000 for the construction of a hospital for the leper colony.[123] It seems that the middle-level officials of colonial bureaucracy had accorded with the scheme of erecting such institutions despite some apprehensions, mainly the financial questions that were put forward by higher authorities. Biswamoy Pati and Chandi P. Nanda have pointed out that the question was about the colonial investment and public charity concerning the foundation of the asylums. As the disease had been largely associated with the poor, the government initiatives were hailed by urban elites of Orissa which in turn legitimized the maneuver of Raj to protect the population from contracting leprosy. To Pati and Nanda, there was a 'distinct class angle' allied with the colonial way of seeing 'wretched' beings.[124]

Eventually, the government continued to extend the Act to other asylums as well. The first donation in giving transient relief to the outcast 'lepers' of Raniganj was made in 1890, but the Asylum was only opened a few years later in 1893. This scheme was delayed due to the unavailability of a suitable site for the Asylum which had been resolved shortly when the Bengal Coal Company had gifted a site to Rev. F.W Ambery Smith for his earnest efforts. The Asylum

[121] OSA, GOB, File no. 3-L/5, Municipal Department, Medical Branch, Pros. Nos. A 12-14, April, 1905, Acc No. 12700, Leper Asylum at Puri.
[122] ibid.
[123] See L.S.S. O'Malley, *Bengal District Gazetters, Puri,* (Calcutta: the Bengal Secretariat Press, 1908), 137.
[124] Biswamoy Pati and Chandi P. Nanda, "The leprosy patient and society: Colonial Orissa, 1870s-1940s," in *the Social History of Health and Medicine in Colonial India*, eds. Biswamoy Pati and Mark Harrison (New York: Routledge, 2009), 113-125.

was well-planned with seven houses; each of them had three large rooms to accommodate the inmates comfortably. John Jackson once visited the Asylum in 1901 with Rev. H. M Bleby of the Wesleyan Missionary Society who was the Superintendent of the institution supervising the works on behalf of Mission to Lepers. There were altogether 90 leprosy sufferers of which 54 were men and 33 women, and 3 children. To Jackson, the Raniganj Asylum was a very complete institution with separate female wards, chapel, and hospital, although, it had been too small to receive the affected people.[125] The GOB sought to bring the Asylum under the Act and would like to take the opinion from Rev. T. M Kerruish, the then Superintendent of the Raniganj Asylum. He had no objection with the proposal, even the Sub-Divisional Officer and the District Civil Surgeon, Colonel French Mullen both were in favor of extending the Act to the Asylum.[126] Ultimately, the Raniganj Leper Asylum was brought under the Lepers Act of 1898 in May, 1907. The leprosy sufferers from Burdwan and Birbhum had been sent there. The annual grant of Rs. 3,600 was sanctioned for the Asylum. However, the Commissioner of Burdwan Division had raised the issue of amalgamating the two leprosy institutions, i.e. Raniganj and Asansol, into one about which the GOB was willing to have a discussion.[127] The Asansol Leper Asylum, named as Christaram Asylum, was run by the American Methodist Episcopal Mission and financed by the Mission to Lepers. Rev. W. P Byers in 1895 had put forward the condition of this Asylum as 'pleasant' and 'delightful'. There were 30 inmates including 4 untainted children.[128] A *kuccha* house had been built for them.

[125] John Jackson, *In Leper-Land: A Record of 7,000 Miles among Indian Lepers, with a Glimpse of Hawaii, Japan and China* (London: The Mission to Lepers, 1911), 81-83.
[126] OSA, GOB, File no. 3-L/5, Municipal Department, Medical Branch, Pros Nos. A 50-54, February, 1906, Acc No. 12768, Grants to Leper Asylums.
[127] WBSA, GOB, File no. 3-L/7, Municipal Department, Medical Branch, Pros. No. 23, February, 1910, capitation grants to Leper Asylums at Raniganj and Asansol.
[128] NAI, GOI, Pros. No. 123, March 1897, Home Department, Medical Branch, Part B, Report of the Leper Mission in India and the East, [Christaram means 'rest in Christ'].

"For them a kaccha house was built last summer, when I was in Darjeeling. I have added a room on the end of the men's building for bad cases and have the Chapel walls up. It has to be roofed in, but I have no more money at present. A lady in Asansol has undertaken to support one of the untainted children… all are well and happy, growing in grace, and in the knowledge and the love of God. We have some good times together."[129]

The number of inmates in the Asylum had increased to 135 in 1913 of which 70 were male, 46 females, and 7 children. Interestingly, most of the leprosy sufferers were Christians;[130] some of them were supposed to have been converted into Christianity and others might be the Europeans and Eurasians, especially those who were working in colliery and railways.[131]

In 1915, the Bankura Leper Asylum on the other hand got approximately 107 patients and was operated under the Lepers Act since then.[132] This Asylum had formerly been established in 1902 by the Wesleyan Missionaries. Bankura district was one of the most leprosy prone areas in the Raj. The sufferers were wandering around the streets and seeking alms in the bazaar or in villages. In 1901, the Rev. J. W Ambery Smith, with the assistance of Mission to Lepers had decided to open an asylum for the leprosy affected people. A resident of Brighton, Mrs. Bryan offered an extensive sum to erect the buildings including a church. But initially the 'lepers' did not come to the Asylum as they were supposed to have had strong bigotry against the missionaries, although, the situation changed in few years. There were 56 male 'lepers', 43 females, and 7 children in the Asylum in 1907. The institution was situated at a site about two miles from the town and the inmates were encouraged to garden and to assist the staffs to keep

[129] NAI, GOI, Pros. Nos. 123, March 1897, Home Department, Medical branch, Part B, ibid.
[130] NAI, GOI, Pros. No. 148, Year June, 1914, DGIMS Department, General Branch, 39th Annual Report of the Mission to Lepers (formerly the Mission to Lepers in India and the East), for the year 1913.
[131] See *Imperial Gazetteer, Bengal, Burdwan Division* (Calcutta: the Bengal Secretariat Press, 1907), 6.
[132] NAI, GOI, Delhi Records 6, Pros. Nos. 36-61, Home Department, Medical Branch, Part A, August 1917, Statistics of Leper Asylums in India.

the compound clean. Most of them belonged to low caste families, but there were several others from higher castes as well.[133] The 'leper' problem was still very prevalent in the district during 1920s. According to the 1911 census report, there were 23 leprosy sufferers out of 10,000 populations. This data referred to the area as 'the blackest leper spot in the whole of India'. Moreover, the Asylum, which could accommodate about 150 'lepers', was entirely filled with voluntary inmates, whereas, the existence of mendicant 'lepers' in the district, i.e. not less than 1,500, was troublesome to the administration. The District Magistrate of Bankura, Mr. Vas was of the opinion that almost 2/3rd of the total leprosy sufferers in the district were not paupers or vagrants. To Vas, the government surely required more asylums for the pauper lepers but there was hardly any regulation concerning the 'private lepers' who were far larger and a dangerous class. The GOB, therefore, had to think about setting up a leper colony in Bengal.[134] The CMS medical missions, in association with the Mission to Lepers and the BELRA, were working approximately in 30 leprosy centers in China, India, and Africa in 1939. This included hospitals, homes, settlements, camps, district, and travelling dispensaries. The CMS was closely related to 'leper' works in five places of Bengal Presidency and Bihar, i.e. Calcutta, Ranaghat, Hiranpur, Bhagalpur, and Purulia. Since 1917, the CMS had provided staffs to Purulia Leper Asylum.

The GOB was planning to establish a leper colony especially for the mendicant lepers in Bengal since 1919. With regard to this, the Surgeon General W. H. B Robinson sought the opinion from Rev. Frank Oldrieve who had submitted a scheme to the government for the proposed colony. Primarily, the arid districts, such as Midnapore and Birbhum, had been considered as ideal places for constructing a leper colony. The site, which might be situated at a healthy locality, must have

[133] See L.S.S. O'Malley, *Bengal District Gazetters, Bankura* (Calcutta: the Bengal Secretariat Press, 1908), 84-85.
[134] WBSA, GOB, File no. 3L-3, Local-Self Government Department, Medical Branch, Pros. Nos. A 1-4, January, 1921, Proposal for the establishment of a Leper Colony in Bengal.

cultivable lands, so that it can provide some sort of employment to the 'lepers'. It was the tedium that led the leprosy inmates to escape the asylums; the gardens were essentials in building up an asylum in the way what Professor Sam Higginbottom, the Superintendent of Naini Asylum, Allahabad, did in his institution. He encouraged the inmates in growing vegetables and flowers in the gardens. Therefore, to Robinson, such programs would reduce the number of escapes in future. As far as the accommodation of 'married lepers' was concerned, both Mr. Oldrieve and Robinson had suggested that if the children had been removed from their parents at an early stage, the 'married lepers' should be allowed to stay in the colony.[135] Similar management was observed in Champa Asylum[136] in Central Province which could be the model for the proposed colony in Bengal. Mr. Oldrieve would like to go for complete segregation for the pauper 'lepers' in this colony which could only happen after the amendment of the Lepers Act in 1920. Moreover, the Leper Conference, which was held in Calcutta from 3rd to 6th February, 1920, had put forward this proposal and the question of dealing with the leper problem in the presidency also drew attention of the government. To secure more effectual control over the supposed 'dangerous' contagious 'lepers' by advocating compulsory segregation, the GOI had finally amended the Act. The Secretary to the GOB, Mr. A. Marr thought that the existing asylums, whether maintained by the government or the Mission to Lepers, were not sufficient for the segregation:

"…they are not built on modern line, and are not sufficiently attractive to the lepers to induce them to settle down in contentment and prevent them from wandering away. The Mission to

[135] WBSA, GOB, File no. 3L-3, Local-Self Government Department, Medical Branch, Pros. Nos. A 1-4, January, 1921, Proposal for the establishment of a Leper Colony in Bengal.

[136] Rev. P. A. Panner, an American Mennonite missionary working in Champa, founded an asylum for the leprosy sufferers in 1902. The asylum had been transformed into a hospital-cum-home. In 1903, the Mission to Lepers took over its management.

Lepers have advised that the best way of dealing with the lepers in accordance with modern ideas on the subject is to segregate them in leper "colonies" or "settlements" like those recently started in other countries."[137]

Thus, the government, while taking steps to establish a leper colony in Bengal, wanted a suitable site first, which might be in the districts of Burdwan Division, such as Midnapore, Birbhum or Bankura. On 7th September, 1920, the Commissioner of the Burdwan Division had sent a letter, to the Secretary to the GOB, by informing him about the proposed sites in Bankura and Midnapore districts for the colony. Two were at Hetiagora and Enari from Bankura and the rest of the sites were in Midnapore, such as, the sites in the neighborhood of Salboni Railway Station, Kusumganj, Bahadurpur Police Station, Midnapore Central Jail, and Chandrakona Railway Station.[138] However, the issue of segregating the 'lepers' had gradually become the foremost concern to the authority in Bengal. In 1922, Babu Jatindranath Basu asked Surendranath Banerjee, the Honorable Minister-in-Charge of the Local Self-Government Department of GOB, whether the government had planned anything to segregate 'lepers' in Calcutta. Banerjee, in his reply, made it clear that the scope of the Lepers Act was recently extended with necessary amendments in 1920, but the government was not in a position to enforce the segregation until the accommodation in leper colony or settlement had been available. Furthermore, he added that a settlement in Midnapore appeared to be selected for the colony, for which the Superintendent of the Mission to Lepers received private donations, although, the proposed site could not be purchased until the provincial finances improved:

"A scheme has recently been prepared in consultation with the Mission to Lepers for establishing a settlement of this kind in the Midnapore district. Some private donations towards this scheme

[137] File no. 3L-3, Local-Self Government Department, Medical Branch, Pros. Nos. A 1-4, January, 1921.
[138] File no. 3L-3, Local-Self Government Department, Medical Branch, Pros. Nos. A 1-4, January, 1921.

have already been received by the Superintendent of the Mission, and steps are being taken for the acquisition of land. The capital outlay on buildings will be heavy and the scheme in its entirety cannot be carried through until the state of the Provincial finances improves."[139]

The site at Salboni soon proved to be unfavorable to the colonial officials when they started a trial boring for water in February and March, 1925. The Superintending Engineer, Central Circle had been unsure regarding the foundation of the colony as the selected site did not have considerable water resources to support such a scheme. [140] The issue was taken into account immediately after Ernest Muir had sent an alternative proposal to find out a suitable site for the colony in Bankura which was a highly leprosy endemic area having large number of infected persons. In addition to that, Dr. Muir had submitted the names of an expert committee, consisting of the Surgeon General with the GOB, the Director of Bengal Public health, an engineer appointed by the Public Works Department, an expert appointed by the Agricultural Department, and Dr. E. Muir himself as expert in leprosy, to review the question of a leper settlement in Bengal in 1927. On 18th February, 1928, a government resolution was passed according to which the Expert Committee would be appointed to evaluate the proposal put forward by Muir. Within a couple of months, D. G Hart, the Magistrate Collector of Bankura wrote to Dr. J. M Henderson, the Secretary of the Bengal Leper Settlement Scheme Committee (BLSC) while saying about the present condition of the Bankura Asylum which was congenial to be transformed later into a colony. Extension of irrigation in the site might resolve the water

[139] WBSA, GOB, File no. Q-17, Local-Self Government Department, Medical Branch, Pros. Nos. A 7-8, January, 1922, Council Question by Babu Jatindra Nath Basu regarding segregation of lepers.
[140] WBSA, GOB, File no. 3L-3, Local-Self Government Department, Medical Branch, Pros. Nos. A 41-47, February, 1927, establishment of a Leper Colony in Bengal.

problem and also bring the lands under cultivation.[141] Eventually, a leper colony emerged at Gouripur.

After independence, the Gouripur Leper Colony in Bankura got a leper asylum under the government notification on 21st February, 1952 which would be run according to the section 5 of the Lepers Act and by the Board consisting of the District Magistrate, Bankura, the Civil Surgeon, Bankura, the Superintendent of Police, Bankura, and the Director of Health Services, Public Health, West Bengal. Moreover, the entire territory of West Bengal had been notified as a local area from which the sufferers might be sent to the colony.[142]

To apprehend the leprosy infection, the organizations such as Mission to Lepers and CMS, carried on blending the idea of 'care' with the emerging novel 'cure(s)' which was supposed to be the outcome of tropical diseases research in the British Raj during 1930s and 1940s. The development in preventive and curative medicine ultimately influenced the way in which the missionary organizations had supplied the medical relief to the asylum inmates. Thus, the missionary medicine took a new shape largely persuaded by 'modern treatment' of leprosy which could be 'scientifically' pronounced and more rational. M. K Gandhi once asked Rev. E.B Sharpe, the Superintendent of Purulia Asylum, for a short summary of the new treatment of leprosy. He, therefore, had summed up the answer with three Bengali words, i.e. *Prarthana* (Prayer), *Parisram* (work), *Pichkari* (injections). To him, the 'injection' which had a curative value, was the outward and visible sign of new hope. Simultaneously, the 'work' would reduce

[141] WBSA, GOB, File no. 3L-3, Local-Self Government Department, Medical Branch, Pros Nos. A 34-54, November 1930, establishment of Leper Colony in Bengal.
[142] WBSA, GOB, File no. PH 2L-8/52, Medical and Public Health Department, Public Health Branch, Pros. Nos. 111-113, 1952, Declaration of the Gouripur Leper Colony as the Leper Asylum under section (3) of the Lepers Act-1898.

the despair of the leprosy affected.[143] It was quite evident from these observations of Sharpe that to equate the newer way of treatment with the 'sign of hope', they had frequently adopted persuasive stance towards proselytizing the *supposed* dejected minds:

"…in the Church of the Good Samaritan men and women of all castes and creeds, Brahman and outcaste, university graduates and aborigines, convicts and Christian teachers find themselves bound together in the fellowship and family of Jesus Christ."[144]

Gandhi had often acclaimed the conscientious efforts of the missionaries trying to find out the 'cure' through worship. [145] According to the report, in 1945, there were at least six leprosy asylums in Bengal, i.e. Bankura, Raniganj, Chandraghona, Kalimpong, Calcutta, and Asansol. The Purulia, Deoghar, and Bhagalpur Asylums were under the separate administration of Bihar and the Puri Leper Asylum was in Orissa.[146] The 'lepers' were considered as the display of amoral souls and hence, needed proper religious indoctrination with medical treatment. Therefore, the segregation of sexes in the missionary asylums turned out to be the part of that 'moral teaching' which preferred the separation of the infected and impelled the asylum authorities to construct separate wards for 'female lepers'. Nevertheless, the confinements or asylums, for imprisoning the 'abnormality' or 'unreason', appeared to be the spaces wherein the power of institution characterized the identities of 'inmates'. Sometimes it prompted a sense of belongingness among them which blurred the discernible dissimilarity between 'public' and

[143] See *The Mission Hospital* 43, issue 498 (London: Church Missionary Society, 1939), 149-50. Available through: Adam Matthew, Marlborough, Church Missionary Society Periodicals, http://www.churchmissionarysociety.amdigital.co.uk/Documents/Details/CMS_CRL_Mission_1939_07, Accessed June 12, 2019.

[144] See *The Mission Hospital* 43, issue 498 (London: Church Missionary Society, 1939), 149-50, ibid.

[145] The Nehru Memorial, Museum and Library (NMML), *The collected works of Mahatma Gandhi, vol. 8*, (Ahmadabad: Government of India Press, Jan to Aug, 1908), 179-180.

[146] NAI, GOI, File no. 11-6/45 PHI, DGIMS Department, Public Health Branch, June, 1945, List of Civil Institutions carrying out adequate leprosy treatment.

'private'.[147] Since its foundation, the 'Mission to Lepers' had ensured the complete segregation of sexes in their asylums that became the model to the Raj to control the 'lepers' in the society. Wellesley Bailey, on his visit to Purulia Asylum on 24th December, 1890, had recounted that the women's quarter was separated from the men's by a high wall. Dr. Hilson the Surgeon General and Inspector General of Civil Hospitals, Bengal, was pleased seeing the way the Purulia Asylum had upheld the segregation of sexes than any other asylums in India.[148] On the other hand, Rev. F. W Ambery Smith in 1895, the Superintendent of Raniganj Asylum, was worried about the increasing number of 'female lepers' in the asylum and the institution needed another building for them before rains. [149] In 1908 Conference, the Asylum Superintendents had emphasized the necessity for segregating the sexes in the asylums. The GOB and GOI both recognized the practicability of this idea, but so far as the extension of Lepers Act of 1898 to entire Bengal was concerned, the colonial authority would like to consider the matter with utmost caution. As there were 28,000 'lepers' in the province, according to the 1901 census report, and only 1,200 out of them were contained in the asylums of Bengal, it was quite impracticable to them to extend the Act further for a considerable period. There would have been a serious problem over retaining institutional discipline, if a large number of leprosy sufferers were put into the leper asylums. Therefore, the policy of the government was only to extend the

[147] Partha Chatterjee, *the Nation and its Fragments: Colonial and Postcolonial Histories* (New Jersey: Princeton University Press, 1993), 4-12; Michel Foucault, *Madness and Civilization: A History of Insanity in the Age of Reason*. (Abingdon: Routledge, 1989), 2-5.
[148] Wellesley C. Bailey, *The Lepers of Our Indian Empire: A Visit to them in 1890-91* (London: John F. Shaw and Co., 1891), 122-128.
[149] NAI, GOI, Pros. Nos. 123, Home Department, Medical Branch, Part B, March 1897, Report of the Leper Mission in India and the East, New Delhi.

Act to the asylums having proper arrangements.[150] Moreover, this conference paid exclusive heed to the issue of asylum discipline; it recommended that:

"in the case of lepers who have left their asylums after committing serious offences, the superintendent of any other asylum to which they may apply for admission, should, on the facts of the case being communicated to him, at once hand over such persons, if requested to do so, to the superintendent of the asylum from which they have fled, or if they refuse to return, dismiss them from the institution."[151]

This was an appeal, from all the Superintendents who attended the Conference, to the colonial state for empowering the local powers and the asylum authorities to 'discipline' the dissents by barring their entrance to other asylums. At the same time, the Superintendent, to whom the escapees sought refuge, should send them immediately to their home institutions without further delay or would lay them off the institution.

The reports from both Raniganj and Bankura Asylums in 1919 showed that the sexes were segregated in the case of both the married and unmarried, although, in Bankura Asylum, the female 'married lepers' paid a visit to their husbands only during the day. However, all leper asylums in India did not follow the rules of 'Mission to Lepers', there was an appeal made by the Mission, in the Conference of 1920, that the separation of sexes should be enforced in the 'leper' institutions where similar regulations did not prevail.[152] This issue was still blowing in the wind in 1940s. The Government Report of 1941 stated that it should be enviable for the married life in

[150] WBSA, GOB, File no. 3L/18, Municipal Department, Medical Branch, Pros. Nos. 18-21, June, 1908, Leper Conference at Purulia.
[151] File no. 3L/18, Municipal Department, Medical Branch, Pros. Nos. 18-21, June, 1908, ibid.
[152] NAI, GOI, Pros. Nos. 107-108, Delhi Records 1, Home Department, Medical Branch, Part A, Sep, 1920, *Compulsory segregation of pauper lepers and Separation of the sexes in leper asylums*.

the leprosy institutions to be prohibited unless the woman was beyond child-bearing age.[153] It shows that the regulations, having subtle imperatives, were made only to restrain the rights of leprosy sufferers of the asylums in the name of reducing the angst that remained in the mind unaltered. The Bhore Committee's Report of 1946 had discussed the importance of isolation regarding infective cases, but less importance was given to the issue of the segregation of sexes in the leprosy institutions in British India. Whereas, the report had portrayed in detail the way in which Purulia Asylum worked where the segregation of sexes was enforced.[154] Therefore, the condition of 'lepers', their sufferings, and how far they were compelled to go through the 'Christian dictums' had been largely unaddressed in this report.

Conclusion

It was the 'evangelized persuasion' that made the leprosy sufferers compliant to the imperial authority, and the disciplinary nature of the confinements, prevailing in the idea of 'care', has been explored with regard to the management of the missionary asylums in Bengal. The experiences of the sufferers in the asylums, often valorized by the missionaries, were used as testimonies in favor of the colonial administration and its pretentious efforts to uphold the image of a welfare state. A few scholars have pointed out that Christian missionary education did not provide a uniform model to all Afro-Asian countries that were under colonial power. For example, the intense secularization and the trend of anticlericalism in the French Africa, especially after the end of the protracted Dreyfus affair in 1906, the Christian education system faced apathy from the colonial state.

[153] GOI, *Report on Leprosy and its control in India,* 43.
[154] See *Report of the Health Survey and Development Committee*. (1946).

V. Subramaniam is of opinion that in the British India, the general unconcern and even dissuasion of Christian missionary activity by the Raj proved to be a major problem in spreading religious education. The conflict was between Christian propaganda with influential educational institutions and 'Hindu' or 'Muslim' counter-propaganda alongside the other mechanisms of western missionaries.[155] This hypothesis has largely contradicted the facts, directing towards the way in which Christian religious education spread in British India in association with the state. The missionary organizations like American Presbyterians, the Mission to Lepers, and CMS continued their works within the colonial framework and got financial assistance from the state consistently. James P. Alter has taken the references of American Presbyterians in India who, although, were fully aware of the despotic nature of colonial rule in India conceded the necessity of retaining the 'greatest rule' of the British for the heathens in India.[156]

When the question of spiritual education and medical treatments in leprosy asylums of colonies has to be dealt with, the professionalism of missionary women toward the sufferers needs special attention. Elizabeth Prevost has intended to show how the missionary women since the late nineteenth century prepared a counter-Victorian narrative against the ideal femininity that could only be manifested through marriage and motherhood. As the missionary institutions represented 'spinsterhood' and provided a different practice influenced by religiosity, precisely the evangelical conviction, the professionalization of missionary women's work proceeded the larger women's movement by facilitating independent work and unmarried way of life outside the

[155] V. Subramaniam, "Consequencies of Christian Missionary Education," *Third World Quarterly* 1, no. 3 (July, 1979): 129-131.
[156] James P. Alter, "American Presbyterians in North India: Missionary Motives and Social Attitudes under British Colonialism," *Journal of Presbyterian History* (1962-1985) 53, no. 4, (winter, 1975): 291-312.

metropole but the process was very much peripheral. [157] The mechanisms, introduced in the leprosy asylums and colonies of Bengal, were made in such a way that proved to be detrimental to the rights of the inmates; but, surprisingly the leprosy sufferers could not find any reason to tear down the walls of the confinements. However, there were many instances of patients' unrests occurring in the asylums during 1920s to 1930s, though; the nature of those discontents was mostly local, hovering around the issues like inferior quality of food, the need for medical treatments and the discriminations against the 'native' sufferers. The larger political society of the Raj, being an adherent critic of the way in which the colonial administration treated the inmates of the asylums, was in favor of offering the advanced medical treatments instead of building up a political movement in support of the sufferers. Thus, the 'affected' preferred to imagine these isolated places as sort of spaces of their own where they could easily manage to sustain their existence without the interventions and interferences of the outsiders. This was, nonetheless, a form of protest negating the supposed socio-cultural imperatives of a modern society. The belongingness, which was carrying the ideas of unconditional 'freeness', had embraced the triviality, but, it restricted the rights of the marginal. Missionary asylums were more efficient, in terms of managing the leprosy inmates, to pursue this objective in contrast to the government institutions. The religiosity put the moral obligation to the inmates who would never defy the bondage of 'Hope' as long as the structure of benevolence existed. That was the easiest way to the colonial state, to extend a model of seclusion to the 'diseased' in which the sufferers consistently found themselves amidst the struggle between what was 'moral' and 'immoral'.

[157] Elizabeth Prevost, "Married to the Mission Field: Gender, Christianity and Professionalization in Britain and Colonial Africa, 1865-1914," *Journal of British Studies* 47, no. 4 (October, 2008): 796-826.

CHAPTER 4

Institutionalization of Medical Research: The Leprosy Research in the Calcutta School of Tropical Medicine (CSTM) from 1914 to 1955

The term 'Institutionalization' is frequently used to explain the *functioning* of a particular establishment. It encompasses the other impulsive concerns like policymaking, structure of governance within the institution, resources, governing apparatus, and agencies which take the stakes to implement the programs undertaken by the 'Organization'.[1] Similarly, the workings of an institution have been largely depended upon the relationship, creating an affinity entirely with the social order or with the social, political, and economic behavior of society. To Morehouse, 'Institutionalization', as a concept, is based on a three-dimensional matrix. The first dimension explores the sequential arrays of an organization of science in India. The third element, which takes the 'variables' into account that might have changed over a period as inherent system of organization, and its purposeful modifications have been frequently retreading their inner characteristics. This chapter, however, intends to emphasize on the second facet or dimension. As far as the second dimension is concerned, i.e. the 'ways of knowing' or the investigative processes, it does operate both internally, when it addresses the method of organizing scientific ideas, and externally by retaining the interactions with the societal segments.[2] [3]The scientific research, not only looking into the essential issues, limitations of inquiries, and research gaps but framing out the formative model of planning as well, if not by default, is pertaining to this reciprocal progress of '*scientificity*'.

[1] Ward Morehouse, *Science in India: Institution-Building and the Organizational System for Research and Development* (Bombay: Popular Prakashan, 1971), 1-2.
[2] Morehouse, *Science in India*, 2-5.
[3] Apalak Das, "Institutionalization of Leprosy Researches in Calcutta School of Tropical Medicine (CSTM) and other Programmes from 1920s to 1950s," *Indian Journal of History of Science* 53, no. 4 (December, 2018): T147.

For institutionalizing the 'Organization', these [researches] are a few normative parts, holding 'Institution' and 'Society' together. The 'Institution' has been somehow distinctive in nature from organization which requires empirical miens. It is true that the institution building, which seemed to be one of the major intents of the British colonial state to organize the scientific pursuits in the Raj, was already begun in the nineteenth century. Perhaps, the way 'Institutionalization of science' happened to be embarked on in the mid seventeenth century England through the foundation of the 'Royal Society of London' in 1660 had influenced the colonial policies related to institution building in the colonies.[4] Prior to that, the Royal College of Physicians, London was established in September, 1518 that triggered the medical research well before the seventeenth century.[5] As Worboys has articulated that no such feature called 'Imperial science' was there in the British Empire; instead the scientific explorations should be contextualized within the broad colonial political and administrative fragments 'with separate activities and policies in the dominions, India and colonies'.[6] The object was to initiate a schema which would promote the scientific researches in the metropolis and peripheries, so that Britain's economic and scientific backwardness in comparison to Germany and the United States could be trimmed down significantly.[7] The 'Imperial science' project proved to be imprudent; although, since 1880s, the efficacy and universalism of science have had induced the colonial policies, disciplines, and projects, while integrating more panoptical approaches into it.[8]

[4] Michael Hunter, *Science and the Shape of Orthodoxy: Intellectual Change in Late Seventeenth-Century Britain* (Woodbridge: the Boydell press, 1995), 120-21.
[5] Elizabeth Lane Furdell, *the Royal Doctors 1485-1714: Medical Personnel at the Tudor and Stuart Courts* (New York: University of Rochester Press, 2001), 23.
[6] Michael Worboys, "Science and the Colonial Empire, 1895-1940," in *Science and Empire: Essays in Indian Context (1700-1947)*, ed. Deepak Kumar (Delhi: Anamika Prakashan, 1991), 13.
[7] Worboys, "Science and the Colonial Empire," 13.
[8] Das, "Institutionalization of Leprosy Researches," T148.

Similarly, the development of bacteriology, parasitology, therapeutics, virology, laboratory medicine, and hospitals ushered in a new epoch in the tropical diseases research when germ theory had made an imprint over the western medical academia by overriding the miasma theory at the second half of the Victorian period. In the early years of twentieth century, the medical researchers, working on tropical diseases, had some sort of towering belief in the power of microbiological and parasitological study resulting affirmative changes in the tropical areas. Most of them were colonial aficionados believing that their investigations would ameliorate the lives of colonial settlers and also heighten the economic growth.[9] The expansion of European empires which provided new domains of medical research, pedagogy, and the colonial pledge to the 'scientific enquiry' helped them to widen individual and dexterous relationship with the tropical disease researchers, their own scientific communities of home and the colonial peripheries as well.[10] Frederick Cooper has rightly pointed out that imperialism was not just 'a projection of a European state'; its inner dynamism and exchange of diverse ideas, inside the empire, are often overlooked.[11] To situate the tropical diseases research in an imperial frame, one has to consider multiple issues instantaneously like, the way in which colonized subjects were trussed with the missionaries, merchants, traders, and even the colonizers. It was not just to facilitate the political endeavors but to craft a universal goal for proselytizing the 'diseased', leading a humanitarian movement, and scraping the 'evils' of tropical diseases. The most intriguing feature in this encounter is that the tropical medicine experts had succeeded to develop

[9] Deborah J. Neill, *Networks in Tropical Medicine: Internationalism, Colonialism, and the Rise of a Medical Specialty, 1890-1930* (Stanford: Stanford University, 2012), 2.
[10] ibid, 2.
[11] Neill, *Networks in Tropical Medicine*, 2-3.

a web of professionals and physicians who helped out in monopolizing the colonial investigations in medical science as a collective authority.[12]

One of the potential roles of science adjoined to 'constructive imperialism' was to find out the ultimate solution of environmental problems and emerging tropical diseases. When Wyndham Dunstan was the director of the Imperial Institute in London from 1903 to 1924, the imperialist view was that the 'science' would definitely play the leading role in the colonial development.[13] This could only be achieved through the means of institutionalizing scientific research. That was the reason which forced the colonial state to set up institutions entirely devoted to medical research since the early twentieth century. Before Dunstan's idea of colonial progress was framing in, Patrick Manson had explained that the objective of London School of Tropical Medicine (LSHTM), founded in 1899, was the most cost-effective to the colonial government. On contrary, Ronald Ross had cynically shown that he was associated with the Liverpool School of Tropical Medicine (LSTM) only because of 'the businessman there would not be slow to learn the great advantages… [for] their plantations, factories and trade of the new knowledge'.[14] Joseph Chamberlain took over the Office of Colonial Secretary in 1895 which in turn triggered the institutionalization of disease research.[15] There had been three alternatives that remained open to the colonial authority with regard to control the spread of contagion: First one was to eliminate the parasite or microbes followed by the second one that largely preferred to exterminate the vector. The third alternative was to disrupt the cycle of transmission by isolating the parasite from its hosts. The parasite-vector model, through 1900s, had been effectively employed to other tropical diseases and gradually the theory was germane to the medical

[12] Neill, *Networks in Tropical Medicine*, 3-4.
[13] Worboys, "Science and the Colonial Empire," 13-16.
[14] ibid, 16-17.
[15] Worboys, "Science and the Colonial Empire," 15.

specialty of tropical medicine. In the academic biological settings, parasitology or protozoology, as a new branch of study, did not spare any single chance to popularize the germ theories of disease, besides that, these specializations recommended that the most feasible way to control communicable diseases was to rescind disease agents or their vectors. But, apart from biological mapping, parasitology might not have been evolved without the colonial settings. The protozoan parasites were discovered and their life-cycles or medium of transmission through animal vectors appeared to be nurtured in the context of colonial or military medicine.[16] Meanwhile, some initiatives were taken by the Colonial Office, for example the Tropical Diseases Research Fund was founded in 1904 and the Royal Society/Colonial Office Sleeping Sickness Bureau was jointly inaugurated in 1908; the American Public Health Laboratory in Manila had been founded in 1902. The Belgium State School of Tropical Medicine was instituted in 1906 and the Wellcome Tropical Laboratory came into existence at the Gordon Memorial College in Khartoum.[17] While keeping the idea of 'Enlightened despotism' in its mind, the colonial government in India had followed the model of institutionalization in a similar way. The Pasteur Institute appeared in 1900 at Kasauli which was seen as the place for the Central Research Institute after receiving official approval in 1906. At Coonoor, Madras, the Pasteur Institute of south India was officially set off in 1907. Simultaneously, the King's Institute of Preventive Medicine was inaugurated at Guindy in the Madras Presidency and a Medical Section of the Asiatic Society of Bengal started working in 1906, creating a space for discussing clinical issues.[18] Much later, though in the mid 1910s, the Pasteur Institute of Burma set in motion from

[16] Michael Worboys, "Public and Environmental Health," in *The Cambridge History of Science, vol. 6: The Modern Biological and Earth Sciences*, eds. Peter J. Bowler and John V. Pickstone (Cambridge: Cambridge University Press, 2009), 154.
[17] Helen Power, "The Calcutta School of Tropical Medicine: Institutionalizing medical research in the periphery," *Medical History* 40, no. 2 (1996): 198-199.
[18] Power, "The Calcutta School of Tropical Medicine," 199-200.

Rangoon in 1915 and the Pasteur and Medical Research Institute of Shillong started functioning from 1917. Moreover, the settings of medical research continued to change rapidly after the appointment of Charles Pardey Lukis (1857-1917) as the Director General of the Indian Medical Service (IMS) in 1910 who was also formerly the Principal of the Calcutta Medical College and the Professor of materiamedica. The enthusiasm of Sir Harcourt Butler, who helped to found the Indian Research Fund Association (IRFA), was too a decisive factor in the growth of colonial medical research.[19] [20]

The Empire at Work: The Foundation of Tropical Diseases Research Schools and Fund in Britain

The British Empire had desired to institutionalize the tropical diseases research in home through a proper organizational approach. This would be considered as one of the 'colonial' experiments that might shape the structure of medical research in the core and the periphery as well. The LSHTM and the LSTM were the only institutions tuning the imperial optimism in a high pitch. Sir Joseph Chamberlain, the Secretary of State for the colonies, requested the Management Committee of the Seamen's Hospital Society (SHS) to found LSHTM which would be associated with their hospitals. On 2nd February, 1898, Sir Chamberlain had sent a proposal to the Secretary of SHS concerning the accommodation problem of proposed London School.[21] The Committee had set forth a scheme and a guesstimate for building and its maintenance cost. Chamberlain agreed to the scheme with a contribution of £3,550, provided as the initial cost of the School, which should have been made in the best interests of the concerned colonies and protectorates. This was finally endorsed on 14th July. Meanwhile, Chamberlain wrote to the General Medical Council and the principle medical schools of United Kingdom about the

[19] ibid, 200.
[20] Das, "Institutionalization of Leprosy Researches," T148.
[21] See "London School of Tropical Medicine," *British Medical Journal*, hereafter BMJ (February 7, 1914): 321.

importance of tropical medicine in the medical education of newly appointed medical officers who were willing to work at the colonies. It would ultimately ensure the pre-requisite knowledge of medical officers, contending with such diseases which were rampant in the tropical regions.[22] The General Medical School clearly stated in its resolution that:

" ..while the Council is not prepared to recommend that tropical medicine should be made an obligatory subject of the ordinary medical curriculum, it deems it highly desirable, in the public interest, that arrangements should forthwith be made by the Government for the special instruction in tropical medicine, hygiene and climatology of duly qualified medical practitioners who are selected for the colonial medical service, or who otherwise propose to practice in tropical countries."[23]

On 19th August of 1898, a government circular, a copy of which had been sent to the self-governing colonies, was dispatched to the Governors of Crown colonies. The instruction was to collect the specimens of any material for teaching purpose in the School. The Committee of SHS proposed 2nd October, 1899, as the opening date of LSHTM. Chamberlain had sent the syllabus and a note regarding the fee structure of residence and tuition to the colonies on 11th November.[24] In this circular, he mentioned another School of Tropical Diseases established on 22nd April, 1899 at University College of Liverpool. In 1899, the London School received 79 students gearing up to 96 in the next session. It increased to 159 in 1911 and 178 in 1913. From 1899 to 1913, it is to be noted that around 1,674 students had gone through the course of London

[22] ibid, 322.
[23] ibid, 322.
[24] See "London School of Tropical Medicine," *BMJ*, 322; Wellcome Library Collection (WLC), the *Report of the London School of Tropical Medicine for the Year of 1899-1900* (London: Seaman's Hospital Society, 1900), 5. Ref. b22397462.

School.[25] Besides this, the innumerable cases of tropical diseases, including 2 leprosy patients, admitted to the newly opened wards from October 1899, to October, 1900.[26] On the other hand, the LSTM was founded by Sir Alfred Lewis Jones. He decided to contribute £ 350 annually for three consecutive years for indorsing the study of tropical diseases**.** Mr. William Adamson, the President of the Royal Southern Hospital, agreed to take this proposal. R.T Glazebrook, Principal of University College, Liverpool, had received a letter from the Secretary of the Royal Society, Dr. Michael Foster in which Foster explained the nature and workings of the Tropical School thoroughly. Later, a meeting was arranged by A. L Jones in the office of Messrs, Elder, Dumpster & Co., on 23rd November, 1898 to discuss about the treatment of malaria cases. In this meeting, unanimously Mr. A. L Jones had been appointed as Chairman along with Mr. William Adamson who became Vice-Chairman.[27] Therefore, a committee had been formed which passed a resolution regarding the foundation of Liverpool School. The Committee aspired to get the government recognition of certificates and courses of study offered by the School for which Dr. Carter, Glazebrook, and A.L Jones had to take the consent of Joseph Chamberlain. On 20th January, 1899, the committee finally decided to appoint a chair in tropical diseases**,** at a salary of £250 per annum and Professor Boyce as Dean of the LSTM.[28] Major Ronald Ross entered to this School couple of months later and he was elected as honorary consulting physician for tropical diseases in the Hospital.[29] The focus of the investigation was more on malaria, appeared to be a deadly one in tropical areas, than any other disease, but as a whole it fostered and developed the tropical diseases research in such a way that the medical professionals could take advantage of

[25] "London School of Tropical Medicine," *BMJ,* 322.
[26] See the *Report of the London School of Tropical Medicine for the Year of 1899-1900,* 5-7.
[27] See the *Liverpool School of Tropical Medicine: Historical Record 1898-1920* (Liverpool: University Press of Liverpool, 1920), 5-6.
[28] See *Liverpool School of Tropical Medicine,* 11.
[29] ibid, 13.

this infrastructure in order to promote the importance of tropical medicine in the colonies. In 1904, the Advisory Committee for the Tropical Diseases Research Fund, formed by the Secretary of State for the colonies, had a total income of £3,245 in 1912 of which, £1,000 was given by the imperial government and £500 had been provided by Government of India (GOI). The reports, bearing statistical and other information with regard to colonial laboratories of certain colonies and protectorates, informed the Colonial Secretary about the extensive works which had been carried in those laboratories. These had probably given an impetus to tropical diseases research in British India; at least, the committee was satisfied with the programs taken by the colonial governments. So, the income of this committee was distributed for the advancement of research in home. In 1912, the LSHTM received £1,533 whereas LSTM got £1,200 and University of London obtained £750.[30]

Ross was, to a certain extent, skeptical about the way in which tropical diseases research appeared to be materialized in the early years of the twentieth century. In one of the issues of the *British Medical Journal,* he substantiated the reasons behind the intensified crisis in the researches of tropical medicine. While regretting the trifling attention to the tropical medicine, he criticized the colonial manacles which thwarted the imperial authorities from encouraging the experimentation in tropical disease researches in England.[31]

"…I am of opinion that the original enthusiasm for the cause is now ceasing, chiefly for the simple economical reason that no attempt is made to give adequate remuneration to the men who have done such exceptional service to the Empire."[32]

[30] See "Central Organization for Tropical Medicine and Hygiene in England," *BMJ* (February 7, 1914): 323.
[31] Ronald Ross, "Tropical Medicine-A Crisis," *BMJ* (February 7, 1914): 319-21.
[32] ibid, 320.

Even, Ross had considered the entire community of medical researchers, including him, as '*pills*' who were supposed to know the cure for diseases by their insights but, in reality, they had little or no power to relate the acquired knowledge with sanitation. So far as the emerging tropical diseases research of British India was concerned, Ross had little faith on the GOI's approach. In a letter to Manson, in 1898, he expressed his grievances regarding the framing of medical policies. In colonial India, Ross opined, the methods of treatment were banked on symptoms not on disease. It was not only the hospital assistants or assistant surgeons who were ignorant of the tropical diseases but most of the IMS officers themselves had no idea about the emerging issues in the tropical disease treatments.[33] For example, the colonial laboratories, founded in the Raj, had become the site of socializing the disease with its reductionist way of investigation. As Warwick Anderson has pointed out that the tropical medicine transformed the 'tropics' into the laboratories by 'pasteurizing' the colonial society, which means, in other words, the colonial bodies were brought down to the categories of 'pathogens'. Therefore, the non-human factors [i.e. germs, microbes, and bacteria] and their social agencies produced a socio-biological world where the scientist's perception had been hegemonized as scientific truth.[34] In case of colonial laboratories, the relationship between pathogens and bacteriologists/parasitologists seemed to be more complex and problematic. Here, laboratories had encountered with the 'outside' which was alien to them and often met insurmountable socio-economic and political challenges decelerating the progress in tropical diseases research.[35] Along with this, the knowledge deficiency of IMS officers, who eventually turned into government servants, had wrecked the pace of medical research. Ross, being an IMS officer, understood those complexities very well. To him, building

[33] Deepak Kumar Collection (DKC), Ross Papers 02/155, *the Letter from Ronald Ross to Manson*, dated Kurseong, 10th May, 1898, London School of Tropical Medicine (LSHTM) Catalogue Main File.
[34] Pratik Chakrabarti, *Bacteriology in British India: Laboratory Medicine and the Tropics* (Rochester: University of Rochester Press, 2012), 18-19.
[35] ibid,19.

laboratories to categorize the germs for the sake of supervision over the tropical diseases was less essential than that of procuring medical professionals; who, apart from investigating the diseases from 'outside', could facilitate the research in medical science in its 'truest' sense. While calling the GOI '*mule'* as regards to science, Ross thought that idea of laboratory had frightened the British government.[36] The reason, perhaps, was the financial obligation. Still, numerous laboratories were founded in the early twentieth century. Hence, the establishment of Calcutta School of Tropical Medicine (CSTM) has to be perceived as the part of this colonial project, orchestrating the researches on tropical medicine in India. It is worth mentioning that the Imperial authority in India wanted to strengthen and broaden its surveillance over the native subjects only after the plague epidemic in 1896, contiguously Leonard Rogers had stressed on having an institution modeled after London or Liverpool School which proved to be effective in tropical disease research of colonial India and the emerging non-IMS *native* middle class was gradually stepping forward for political control. From these perspectives, leprosy research in CSTM will be a matter of discussion.[37]

Institutionalization of Medical Research in Colonial India: An Overview

Except a few British physicians, like W. Ainslie, Charles Morehead, N.C McNamara who did contribute to the medical sphere in India through their self-dedication and individual resources, there was no such institutional medical research in nineteenth century colonial India. To Anil Kumar, the GOI and Home Department were so averse to medical research that a small number of IMS officers who really wished to pursue their career in the arena of disease research, had

[36] DKC, Ross Papers (950), 02/159, *the Letter from Ronald Ross to Patrick Manson*, Dated 28th June, 1898, LSHTM Catalogue Main File.
[37] Das, "Institutionalization of Leprosy Researches," T149.

been refused to take prospects whenever came to them.[38] The epidemic diseases of colonial India and repeated occurrence of famines forced the GOI to think about the organization of medical research from the late nineteenth century. Through the appointment of Dr. Timothy Lewis and Dr. Cunningham as the Assistants to the then Sanitary Commissioner, the colonial government intended to show its concern regarding 'public health' of India. But unfortunately they were not able to find out the causes of cholera or malaria problem infuriating the Raj in such a period when the British Empire was under construction.[39] However, their investigations on various tropical diseases had opened the new avenues of research in other endemic diseases and influenced the British authority to enforce the public health policies religiously. The malaria parasite and cholera *vibrio* had not been discovered until early 1880s when GOI had set up a small laboratory in Calcutta for Dr. Cunningham in order to carry the research on cholera. This was the first bacteriological laboratory for research in India. In 1883, Robert Koch, with the assistance of German Commission, found the germ of cholera, i.e. comma bacillus or *Vibrio cholerae* and went to Calcutta same year to authorize his discovery. It was exactly a decade after the discovery of *Mycobacterium leprae* by Hansen in 1873. However, Koch's engagement with the world of germs had introduced new vista in tropical diseases research and firmly established the hypothesis that evolved in the Western Europe around 1860s. In 1889, the GOI embarked on the project of deputing medical officers for the field studies aiming to get necessary information about the causation and prevention of diseases.[40] For example, Surgeon Giles was assigned to

[38] Anil Kumar, "Emergence of Western Medical Institutions in India, 1822-1911," in *History of Medicine in India: The Medical Encounter*, eds. Chittabrata Palit and Achintya Kumar Dutta (Delhi: Kalpaz Publications, 2005), 170-71.
[39] National Library, Kolkata (NL), *Report of the Committee on the Organisation of Medical Research under the Government of India* (Delhi: Government of India Press, 1928), 6.
[40] NL, *Report of the Committee on the Organisation of Medical Research*, 7.

work amongst the coolies in the tea gardens of Assam where the incidence of *kala-Azar*[41] and *beri-beri* was high. It was in 1892 when Mr. E. H Hankin, who founded a laboratory in Agra, had arrived in India as a chemical examiner and bacteriologist, simultaneously, both the Secretary of State for India and GOI had approved the proposal of inaugurating a Pasteur Institute in India.[42] Things changed promptly after 1894, when E. Hart, the editor of the *British Medical Journal*, reprimanded the IMS in the first Indian Medical Congress held at Calcutta in 1894 for being potential numb to the scientific research and unenthusiastic to form a largest disease laboratory in British Empire. To him:

"A pestilence breaks out in an important colony. The local physicians display…unlimited courage and devotion to duty; but the scientific part of the work has to be done for us by the outsider…Run over some of the names associated with the discoveries and judge- Cholera, Koch; Leprosy, Hansen; Malaria, Laveran… and latest of all, Plague, Kitasato."[43]

The President of this Congress wrote to the GOI in January, 1895 sending three resolutions passed by Congress. Two of them had dealt with the formation and endowment of a research institute. To establish a bacteriological laboratory for entire British India, the GOI pursued a proposal to release Mr. Hankin from his duties as chemical examiner and put him in charge of whole scheme.[44] As the local governments put forward some hindrances, for example the

[41] Achintya Kumar Dutta, "Medical research and control of disease: *Kala-azar* in British India," in *the Social History of Health and Medicine in Colonial India,* eds. Biswamoy Pati and Mark Harrison (New York: Routledge, 2009), 93-108.
[42] NL, *Report of the Committee on the Organisation of Medical Research,* 7.
[43] Anil Kumar, "Emergence of Western Medical Institutions in India," 171.
[44] NL, *Report of the Committee on the Organisation of Medical Research,* 7.

financial imperative, with necessary bacteriological requirements of entire India, it was one of the reasons for instituting the laboratory at one place; the scheme eventually had to be declined.[45]

Afterwards, in 1896, the plague epidemic created a medical as well as political tremor in the system of colonial governance. Pardey was of the opinion that as cholera changed the perception regarding sanitation in England almost sixty years ago; likewise, plague invigorated the medical research in British India.[46] Mr. Haffkine, initially appointed by GOI for preparing anti-cholera inoculations in Bengal, was sent to Bombay to investigate the issue and to develop a prophylactic treatment for this disease. When he inoculated himself on 10th January 1897 and other medical men publicly, the GOI had brought a few bacteriologists from Europe to form the first Indian Plague Commission in which Dr. Almroth Wright was a member. The previous plan of constituting the 'Central Bacteriological Laboratory' was once again revived, now with a scheme delineated by Dr Wright. Meanwhile, the major discovery of Ronald Ross influenced and induced other IMS officers to engross in medical research.[47]

Nevertheless, the institutionalization of medical research in colonial India had truly commenced after the foundation of IRFA in 1911 just before the war and the establishment of CSTM. It received annual grant of Rs. 5,00,000 from GOI to pay the salaries of certain officers (the members were from the Bacteriological Department whose salary had been formerly arranged by the Director General's Budget) providing a total income for flexible expenditure on research of approximately Rs. 9,00,000.[48] During the war, the IRFA had conducted some remarkable

[45] ibid, 7.
[46] Anil Kumar, "Emergence of Western Medical Institutions in India," 171.
[47] NL, *Report of the Committee on the Organisation of Medical Research,* 8-9.
[48] NL, *Report of the Committee on the Organisation of Medical Research,* 14.

medical investigations in malaria[49], kala-azar, and leprosy and continued to be the principle funding agency in medical research of British India.[50] The institution, relying on the colonial structure, has been extending its scope and functions in post-independent India as Indian Council of Medical Research (ICMR) since 1949.

However, it was rather difficult to carry out medical research in India, even after the foundation of IRFA, for many reasons. Amongst which the two particular factors, indeed, caused severe damage. The development of new laboratories and bacteriological departments in British India was not taken into account seriously, to be very precise, earnestly. Medical researchers were appointed as permanent stakeholders to definite laboratories instead of being itinerant in field investigation. Therefore, the immobility of resource persons appeared to have been the greatest shortcoming of research in colonial medicine. The second reason was perhaps more plausible than the previous one. Researchers, despite giving their best in their respective fields, were increasingly entrapped and entangled with numerous administrative duties and clerical jobs at the expense of their medical investigation. Soon it generated debacle in the medical field that persuaded the colonial authority to probe into the matter judiciously.[51] In 1920, the GOI had invited Professor E.H Starling, C.M.G, F.R.S, Jodrell Professor of Physiology at University College of London, to prepare a draft for establishing the Central Medical Research Institute in India. Professor Starling, after travelling around India extensively with Major E.D.W. Greig, I.M.S, had finally put some proposals and a detailed scheme for the foundation of Central Medical Research Institute at Delhi. The GOI, with nominal alterations especially related to financial issues, had agreed to take up the scheme and got the approval of the Secretary of State.

[49] See Arabinda Samanta, *Living With Epidemics in Colonial Bengal, 1818-1945* (New York: Routledge, 2018), 24-47; He has done extensive research on epidemics in Bengal using vernacular sources.
[50] NL, *Report of the Committee on the Organisation of Medical Research*, 14.
[51] Ibid, 12.

On 23rd September, 1922, the Indian Legislative Assembly also adopted a resolution considering Starling's proposal. But, after the recommendations of the Indian Retrenchment Committee, the scheme was abandoned for indefinite period; although, the proposal had shaped the colonial policies regarding medical research and facilitated the process of institutionalization. This scheme had again brought considerable attention of GOI in 1927 when it appointed a committee to review the proposals of Prof. Starling. The Committee members, Walter Fletcher, S.P James, R. Row, and S.R Christopher, arrived at Calcutta to attend the seventh Congress of the Far Eastern Association of Tropical Medicine on 5th December, 1927.[52] To obtain an overview about recent medical research in India and to meet medical professionals from different parts of India and to have a qualitative discussion with foreign delegates, this Conference undoubtedly had given prodigious openings to the Committee members, so that they could make some necessary amendments to the proposals and adapt a new one. The Committee, therefore, had submitted its report on 5th March, 1928, emphasizing on close relationship between the Central Medical Research Organization in India and Great Britain. They also suggested that the Governing Body of the Central Institution and the IRFA should co-ordinate between the representatives of their respective organizations on technical subjects without offering major changes in the existing relations of the Medical Research Department, the IRFA and the Central Research Institute to one another.[53] The cooperation between Britain and India in scientific research altogether was strongly urged during the Second World War; especially after the Royal Society had formed the British Commonwealth Science Committee in October, 1941, to collaborate the scientific issues among the countries of the Commonwealth and British Empire.[54] In 1943, the Report of the Committee had been published as '*Scientific Education and Research in relation to National*

[52] NL, *Report of the Committee on the Organisation of Medical Research*, 15.
[53] ibid, 76-77.
[54] Jagdish N. Sinha, *Science, War and Imperialism: India in the Second World War* (Leiden: Brill, 2008), 60.

Welfare'. By the summer of 1943, the Secretary of State for India, at the request of the Viceroy, had invited a representative body of the Royal Society to provide advice on the organization of scientific research in India.[55] Leo Amery, the Secretary of State for India, stated in a letter to the President of the Royal Society:

"the most important to be discussed…is the organisation of scientific research and industrial research as part of the Indian post-war reconstruction plan, and its coordination with the corresponding activities here. But advice would also be welcomed on current research problems and visits by a distinguished scientist to universities and other research centers would undoubtedly be much appreciated. I have now been requested by the Viceroy of India to convey an invitation to the Royal Society to depute a distinguished scientist to visit India and to enquire whether it will be possible for them to spare Prof. A.V Hill for this purpose…arrangements would be made for him to see as much as possible of India's scientific, technical and research work."[56]

On 16th November, 1943, Prof. A. V Hill[57] arrived in India and within five months he took a tour on number of centers at Calcutta, Delhi, Bombay, Bangalore, Madras, and Kanpur etc. For him, the main impediment in the way of scientific research in India was its apparent isolation from the research environment existing in England and other dominions. The separation of theoretical 'research' from the practical fields largely crippled the growth of scientific temperament. For instance, the medical research in India, happened in the special institutions like the Central Research Institute, Kasauli, the CSTM, the Haffkine Institute, Bombay (Mumbai) so forth and so

[55] Nehru Memorial, Museum and Library (hereafter NMML), Private Paper Section, Prof. A.V Hill Papers, Acc No. 1221, miscellaneous items, S. No.1054, April 1945.
[56] ibid, Report to the Government of India on Scientific Research in India by Prof. A V Hill.
[57] Archibald Vivian Hill (26th September 1886- 3rd June 1977) was a British physiologist, sharing the 1922 Nobel Prize in Physiology or Medicine.

on, were quite disconnected with the medical colleges and universities. Hill proposed for an All India Medical Centre which could facilitate both the research and medical education. Simultaneously, it might bridge the gap between the 'theory' and 'praxis'.[58] This, to some extent, was materialized only in 1956 when the first All India Institute of Medical Sciences was founded at New Delhi.

The Calcutta School of Tropical Medicine (CSTM) and Leprosy Research: 1920s-1950s

Leprosy had neither been considered an 'Imperial danger' nor was it a problem to the colonial state at least till mid nineteenth century. Since the late 1880s, the colonial government was looking for careful execution of partial or complete segregation of 'lepers' in the established leper asylums and colonies after the death of Father Damien in Molokai. This 'Imperial concern' directed to and intertwined with the spatial governance of diseased *natives*.[59] Because of its correlation with the tropical climate, the epidemiologists, public health officers, and the government of Cape and Australian colonies identified leprosy as 'Black disease'.[60] The idea of contagion was extended largely within the European populace and eventually the concept of susceptibility happened to be racially formulated. In order to devise public health policies regarding leprosy prevention, the colonial emphasis was given to the research. Prior to the foundation of CSTM, there was literally no or hardly any institutional research on leprosy in India. The exclusive investigations on tuberculosis, syphilis, leprosy, and guinea worm disease were undertaken by the researchers of Bombay Bacteriological Laboratory (BBL), renamed as the Haffkine Institute in 1925, in the early years of Edwardian era; although, its major aim was to

[58] NMML, Private Paper Section, Prof. A.V Hill Papers, Acc No. 1221, miscellaneous items, S. No.1054, April 1945, Report to the Government of India on Scientific Research in India by Prof. A V Hill, 13-21.
[59] Alison Bashford, *Imperial Hygiene: A Critical History of Colonialism, Nationalism and Public Health* (New York: Palgrave Macmillan, 2004), 81-82.
[60] ibid, 82.

produce sera and vaccines for preventing epidemics like plague. Few efforts were taken on leprosy research, i.e. *the Report on Leprosy by the Royal College of Physicians* (1867) which was publicly criticized for its conclusion that leprosy had been hereditary.[61] There was immense controversy related to the infectivity of leprosy throughout the second half of nineteenth century. Finally, the Leprosy Commission, formed in 1890-91, had firmly stated its disinclination to segregate 'lepers', but the GOI enforced '*The Lepers Act 1898, No. III*' in which, the specifications of isolation was incorporated.[62] In 1905, when Robert Koch had received Nobel Prize, he raised his concern in favor of isolation for certain contagious diseases, like tuberculosis and leprosy.[63] These arguments were unable to resolve the prime issue of leprosy treatment until 1920s. Continual failure of making suitable drug, lack of proper organizational approach and increasing number of escapes from the asylums [especially in North India] indicate that medicinal treatment of leprosy was in a dilemma.[64]

Sir Leonard Rogers, in March 1910, was the first man to suggest the necessity of a tropical medical school in Calcutta in a letter to the Englishman.[65] The death of King Edward in May, 1910 paved the way for initiating this colonial project which would be Bengal's homage to the Late King Emperor. Although, Rogers had prepared a draft proposal for the school, the Lieutenant Governor of Bengal preferred a non-medical proposal and rejected the Roger's idea.[66] Sir Charles Pardey Lukis immediately took this matter to discuss with the GOI and a letter was sent to the Government of Bengal (GOB) on 20thJuly, 1910. Hence, A. Earle, the Secretary to the

[61] Sanjiv Kakar, "Leprosy in British India, 1860-1940: Colonial Politics and Missionary Medicine," *Medical History* 40, no. 2 (1996): 217.
[62] See *The Lepers Act 1898, No. III.*
[63] Bashford, *Imperial Hygiene*, 88.
[64] Das, "Institutionalization of Leprosy Researches," T149.
[65] DKC, Rogers Papers PP/ROG/C.18/1, *the Letter from Leonard Rogers to the Englishman*, March, 1910, Wellcome Library Collection.
[66] DKC, Rogers Papers PP/ROG/C.18/1, *the Letter From Leonard Rogers to the Charles Pardey Lukis*, June, 1913, Wellcome Library Collection.

GOI wrote a proposal to the Secretary of GOB in which the question of establishing a tropical school was scrupulously reviewed.[67] To the colonial officials, it was indeed 'anomalous' that the medical professionals in India had to go for studying tropical diseases in Liverpool or London School where the primary materials had not been as much as they might get in the tropical areas.[68] Therefore, an Indian school, with special equipment for the training of both official and non-official medical men in tropical disease treatments, seemed desirable in existing financial condition.

Ultimately, on 24th February, 1914, Lord Carmichael, the Governor of Bengal, laid the foundation stone of CSTM.[69] In 1925, this was the first institution, having permanent Leprosy Research Center which was administered by the Leprosy Relief Association in cooperation with the Endowment Fund of the CSTM and IRFA.[70] Lord Reading as Viceroy of India appealed for an Indian Council of the newly formed British Empire Leprosy Relief Association (BELRA) and collected over 20 lakhs for initial seed money in 1925.[71] The objectives of this organization were to conduct researches regarding the causation, treatment, and prevention of leprosy under the guidance of CSTM and a leprosy research staff was to be recruited by the Council who worked in the CSTM Department. This Council had also arranged an All India Survey Party to carry out leprosy investigation in various parts of the country since its formation. Half of the annual income of this Council had been distributed every year to the local branches in the provinces for

[67] DKC, Rogers Papers PP/ROG/C.18/1-170 f. 16, *the Letter From A. Earle, Secretary to the Government of India to Secretary Government of Bengal, Municipal Department,* 20th July 1910, Wellcome Library Collection.
[68] DKC, ibid, *the Letter from A. Earle, Secretary to the Government of India to Secretary Government of Bengal, Municipal Department*, 20th July 1910.
[69] Power, "The Calcutta School of Tropical Medicine," 206.
[70] Dharmendra, "Leprosy Research in India," *International Journal of Leprosy* (hereafter IJL) 33, no. 3 (1965): 753.
[71] NL, *the Report on Leprosy and its Control in India 1941* by the Committee appointed by the Central Advisory Board of Health (New Delhi: Government of India Press, 1942), 3.

setting up numerous treatment centers.[72] Alongside, the Council had taken several programs by providing the financial aid to touring of Leprosy Propaganda Officer (LPO) to incite interest and to invigorate anti-leprosy work in India, holding special post-graduate courses of instruction in leprosy, publishing a quarterly journal of leprosy, i.e. 'Leprosy in India', preparing medical literature for technical, general and propaganda purpose, making a draft constitution for provincial and district branches and lastly, organizing field investigations of the epidemiology of leprosy.[73] No other institutions in colonial India were apt for conducting such inclusive interdisciplinary and clinical research on leprosy except the CSTM.

The out-patient clinic of this institution largely resolved the problem of accommodating leprosy patients in the hospital due to the limited number of beds existed in the other medical institutions, but, it had several disadvantages too. This was indeed a challenging chore to spin out a precise observation, over a certain course of time, on the people who were mostly out-patients of the School. Besides, the constrained trails in treatment had not been viable in such clinic where the facilities for the circadian study were seemed to be inadequate. Another anomaly was its location. The research unit, situated in an industrial area with a moving population, offered little infrastructure for unceasing surveillance over the infectious bodies; this could be possible only if the center was in a rural area consisting of comparatively immobile population.[74] Since its inception, the CSTM had addressed the technical aspects of the disease, for instance, histopathology, bacteriology, epidemiology, and clinical medicine. The histologic and clinico-

[72] NL, *the Report on Leprosy and its Control in India 1941,* 3-4.
[73] ibid, 22.
[74] ibid, 33.

bacteriologic leprosy studies had examined the nature of lesions; alongside, a special investigation had been carried on thickened nerves.[75] [76]

Dr. S. N Chatterjee, a renowned leprosy researcher of this School, is still remembered for his pioneering works.[77] He published numerous articles related to thickened nerves in the distinguished leprosy journals. In one of his articles, Chatterjee showed that the 33% leprosy cases of CSTM were due to thickened nerves.[78] Moreover, the CSTM had conducted research on hydnocarpus oil [chaulmoogra oil] and succeeded in preparing low dose schedule of the parent sulfone (DDS). In 1935, the CSTM had set up a rural investigation center in Bankura, which was one of the leprosy endemic areas in India, for epidemiological studies.[79] This institution, from 1920, turned out to be a training center of leprosy for the medical personnel. Meanwhile, Leonard Rogers, who played a decisive role in the tropical medicine, prepared a derivative [soluble sodium salt of the fatty acid] of chaulmoogra oil and injected through intramuscular and intravenous way in 1915 [?].[80] [81] Simultaneously, Rogers and Ganguli got the same result by inoculating sodium morrhuate. Rogers thought that leprosy could be stamped out from the greater part of the British Empire probably within three decades, for which, at least $ 250,000 would be needed for the campaign.[82] As he was one of the few adherents of tropical disease research, Sir Rogers took much interest in the leprosy investigation:

[75] Dharmendra, "Leprosy Research in India," 753.
[76] Das, "Institutionalization of Leprosy Researches," T149.
[77] Dharmendra, 753.
[78] S.N Chatterjee, "Thickened Nerves in Leprosy in relation to Skin Lesions," *IJL* 1, no. 3 (1933): 283.
[79] Dharmendra, 753.
[80] O. P. Jaggi, "Medicine in India: Modern Period," in *History of Science, Philosophy and Culture in Indian Civilization, vol. 9, Part 1*, ed. D.P Chattopadhyay (New Delhi: Oxford University Press, 2000), 183.
[81] Das, "Institutionalization of Leprosy Researches," T150.
[82] See DKC, Rogers Papers PP/RDG/c.13/175, *BELRA (British Empire Leprosy Relief Association)*.

" From the first I made clear that I did not claim to cure leprosy in the scientific sense of removing the last lepra bacilli from the body…I also pointed out the necessity of commencing treatment in a comparatively early stage of the disease to ensure the best results."[83]

For Rogers, Ernest Muir had been the only eligible person to accomplish the leprosy investigation in India. Having been requested by Rogers, Muir took the headship of the Leprosy section of CSTM. On 1st November, 1920, he opened the first Leprosy Research Department in the CSTM.[84] His early works in Calcutta were twofold: first of all, he promoted the improvements in the usage of chaulmoogra preparations for the injection treatment, and secondly, in order to find the actual incidence of leprosy in India with the aim of reducing and controlling the disease, Muir had underscored inclusive medical surveys, i.e. door to door, in the assigned areas.[85] Furthermore, he attempted to conduct the animal experimentations and histopatholgical analysis in CSTM and urged IRFA for the funding of short leprosy surveys in the British India.[86] [87] [88] Frank Oldrieve was certainly impressed about the hopeful results coming out of Dr. Muir's latest treatment in 1921. He was assisted by Dr. J.M. Henderson, employed by the BELRA, on a salary of Rs. 1200-75-1500, from 1926 to 1932. Along with that, Colonel Lloyd provided necessary help to the Department carrying research on 'Wassermann Reaction' in leprosy when many of the early leprosy cases were detected in the skin out-patient clinic of Colonel Acton. In 1922, the annual report of the School stated that the subcutaneous route was

[83] Kakar, "Leprosy in British India," 226.
[84] Leonard Rogers, "Note on the Earlier Work on Leprosy of Dr. Ernest Muir," *Leprosy Review* 18, no. 2/3 (1947): 41.
[85] ibid, 41-43.
[86] National Archives of India, hereafter (NAI), Government of India (GOI), File no. 196/27, DGIMS Department, Public Health (Sanitary) Branch, 1927.
[87] Das, "Institutionalization of Leprosy Researches," T150.
[88] Apalak Das, "Leprosy researchers in the early years (1920s-1950s) of the Calcutta School of Tropical Medicine (CSTM)," *Asiatic Society Monthly Bulletin* 47, no. 8 (August, 2018): 25-27.

the best medium for the administration of esters of various non-saturated oils and a special study was undertaken to examine 1,059 early cases of leprosy from all over India. Subsequently, the school had initiated a program on the correlation of the relative efficiency of chaulmoogra and hydnocarpus oils with their chemical constitution.[89] For the skin lesions, a trial was prepared of dissolved thymol in oil and trichloracetic acid to inject locally and of potassium iodide orally. The researches on diet, personal hygiene, and exercise had been largely highlighted, but the use of thymol in treatment was declined in the following years. Nonetheless, the undistilled esters washed and dried with a weak alkali were considered less painful than that of distilled esters and also *Hydnocarpus wightiana* became more useful than morrhuate ones. Dr. Muir, in 1922, had come up with new drug called ECCO. The name of this mixture was designed after the initial letters of the four ingredients, like ethyl esters of the fatty acids of *Hydnocarpus wightiana* oil 1 cc, pure (doubly distilled) creosote 1 cc (as antiseptic), camphor 1 gm, and olive oil 2.5 cc. It was given twice a week intramuscularly; the initial dose was 0.25 cc and to a maximum of 5 cc. But somehow, this mixture could not generate substantial result which, ultimately, led to discontinuation of its usage.[90]

The IRFA continued to provide financial aid, since 1918, for the training of doctors in the new treatment of leprosy and taking up the asylum expenditure. For this, IRFA had given 5,000 in 1923 and 10,000 specifically for research work. Dr. Muir was the co-coordinator of this entire funding. Meanwhile, Dr. N. K De carried out the investigations regarding the chemical components of ethyl esters extracted from various oils which were tested by Dr. Muir during the leprosy diagnosis. There was another significant episode, occurring in this year, which fostered

[89] Lieut. Colonel R. Knowles, *The Calcutta School of Tropical Medicine, 1920-1933: An Essay Review* (Alipore: Bengal Government Press, 1934), 80.
[90] Col. Sir R. N Chopra, *Indigenous Drugs of India* (Calcutta: The Art Press, 1933), 198-99.

the tropical diseases research in colonial India.[91] An informal Conference of all medical researchers in India had been convened by and held at the CSTM from 29th to 31st October, 1923 to consider the recommendations of the Retrenchment Committee on utilizing the research fund of five lakhs. The delegates were from the medical institutes of British India and the Indian Army; the Director General of IMS and The Public Health Commissioner of GOI had also attended the conference. This Conference was of the opinion that, to use the funds available for research, it required selecting the diseases on which the early investigations would likely to be happened and the co-ordination of medical research would be needed generally. Leprosy, supposedly, seemed to be at the top of the priority list along with influenza, malaria, cholera, epidemic dropsy, plague, small pox, and kala-azar.[92] The CSTM report of 1924 had shown that numerous brochures and pamphlets were issued from the School and twenty men, augmented to twenty four in 1925, got special training in leprosy work; this was the first batch and also one of the earliest leprosy trained physicians in India came out of the Department.[93] Within a few years, this Department of CSTM proved to be major Leprosy Research Center in the British Raj. Dr. Muir had pointed out that patients under treatment should always be counseled about the first change they might notice in their condition. It would probably be a change for the worse. For instance, in nodular cases, the reaction might have been accompanied by the puffing up of old nodular tissues or the appearance of fresh nodules; however, the condition was temporary. It would gradually abate and leave the condition considerably better than before.[94]

The 1925 report indicated the new cases of leprosy with syphilis - a disease which had to be cured first before instituting anti-leprous treatment. During the first five years, almost 311

[91] See the *Annual Report of the Public Health Commissioner with the Government of India for 1923, vol.1* (Calcutta: Government of India Central Publication Branch, 1925), 189.
[92] See the *Annual Report of the Public Health Commissioner with the Government of India for 1923*, 192.
[93] Knowles, *the Calcutta School of Tropical Medicine*, 81.
[94] Frank Oldrieve, *India's Lepers: How to rid India of Leprosy* (London: Marshall Brothers Limited, 1924), 79.

patients were treated in the School of which 74 had been successfully cured having no signs of disease and 127 were much improved. In 1926, out of 60 physicians, 45 received special training in leprosy work and 15 assistant surgeons were sent by the Government of Assam for this training. Meanwhile, the ways of administering hydnocarpus became the foremost concern to the researchers. To reduce the risk of thrombosis, it was advised to withdraw blood into a syringe from the vein for the purpose of mixing with the hydnocarpate solution, before injecting it intravenously. So far as the number of trained workers is concerned, almost 120 physicians, some of them were from Philippines, Egypt, Greece, Nigeria, and the Gold Coast, obtained leprosy training in 1927.[95] Dr. Muir sent the report of a short leprosy survey in the high endemic areas to the Scientific Advisory Board (SAB) of IRFA. This report entitled '*Some Factors which Influence the Incidence of Leprosy*' was published in the *Indian Journal of Medical Research* on 27th January, 1927. In a letter, addressed to the Secretary of SAB, Dr. Muir approached to the IRFA for its financial assistance to the scheme when he realized that the BELRA might be unable to finance the proposal by showing the unavailability of research grant.[96] This reason, that BELRA put forth, was not entirely true because in 1927, the extensive surveys in India were commenced by the Indian Council of BELRA to find out the real incidence and distribution of leprosy. However, that did not create a huge difference of opinion between the BELRA officials and Dr. Muir, but often Muir was found in criticizing the over-enthusiasm of leprosy workers associated with the BELRA.

These surveys, spanning from 2-12 days in each locality, had produced astounding results bequeathing light on the enormity of the problem. The surveys included 4,560 villages in 30

[95] Knowles, *the Calcutta School of Tropical Medicine*, 81.
[96] NAI, GOI, File no. 196/27, DGIMS Department, Public Health (Sanitary) Branch, 1927, the Report of Leprosy Enquiry by Dr. E. Muir.

districts and 66 taluks or municipal towns in ten British provinces and four Indian states.[97] Under the supervision of Dr. Santra, the field survey party inspected the areas of Manbhum, Bankura, the Santhal Parganas, and Chin Hills. Moreover, the twelve district centers in Bengal were inaugurated wherein the lantern lectures often had been organized and the figure of leprosy attendance reached 400 to 500 annually in the village dispensaries.[98] In 1927, the Indian Council of BELRA had spent over Rs. 18,000 on research and from next year, this Council procured the '*Rat Leprosy Enquiry'* from IRFA. Every year, the BELRA expended Rs. 15,000 for the training of physicians recommended from various provinces and Indian states and were deputed to the CSTM for a fortnight course training under the auspices of Dr. Muir.[99]

It was evident from the leprosy researches of the School that a large supply of the drug was needed to analyze any new remedy and to shun the inaccuracies of random sampling. The surveys were conducted in other provinces like, Burma, the Central Provinces and Berar, and the Bombay Presidency. Beside this, 110 doctors received the training in 1928; with the steady increase of leprosy patients at the Calcutta, the Department appeared to have made significant progress in the field of bacteriological and histopathological research. From 1,128 patients attended in CSTM leprosy clinic, 1,053 leprosy cases were detected, whereas, 126 cases had been treated successfully out of 674 cases; the success rate, however, was not much impressive as 316 cases were still under the treatment, but in comparison to 1926, the figures, shown in the annual report of 1928, indicating towards the development of leprosy treatment. Another important event took place in 1929 when the quarterly journal 'Leprosy in India' started its journey from the Leprosy Department. The institutionalization of leprosy investigation shaped

[97] See *Annual Report of the Public Health Commissioner with the Government of India for 1934, vol. 1* (New Delhi: Government of India Press, 1935), 89.
[98] Knowles, *the Calcutta School of Tropical Medicine*, 82.
[99] Balwant Singh Puri, "Work of the Indian Council," *Leprosy Notes* 1, no. 2 (July, 1928): 25; *Leprosy Notes*, changed to *Leprosy Review* from the first volume of 1930, was issued by the BELRA.

not only the entire research methodology of tropical medicine, but also the medical perspectives towards the non-epidemic communicable diseases. Physicians were fascinated to the leprosy training program of the School. In couple of years, around 236 doctors, of whom three were from Egypt, Malta, and Cyprus, came out of the Department as newly trained leprosy workers. Surveys had been carried out in Travancore, Puri, Arcot, the Nizam's Dominion, Delhi, the Central Provinces, Bihar, and Bengal. Some places of true incidence of disease were thought to be fourteen times greater than that of the figures estimated by census officers. In 1930, the School had organized four Committees to probe into the condition of leprosy in India. An All-India Committee intended to focus on Delhi and the United Province, the second one was working on 127 tea-gardens by opening up local treatment centers; A third Committee endured a five-year special Propaganda-Treatment-Survey (P.T.S) scheme for Bengal including Calcutta Port, Malda, Mymensingh, Chittagong, Howrah, Dacca, Coach Bihar, and Bogra and the fourth Committee had surveyed the jute mills near Calcutta. The reason behind carrying out such colossal projects was the ascending leprosy figure in Raj. In the previous year, the out-patient clinic of the School received 11,391 patients of which 929 proved to be infected out of which 39% was carefully examined to find as acid fast bacilli; rest of 61%, the diagnosis was based on clinical evidence as they had the signs of leprosy; though, the figure reduced to 1,462 in next year, amongst them, 1,162 were found leprosy affected. This was, indeed, a difficult errand to follow up the patients for a long period with a proper diagnosis. The Leprosy Department of CSTM had, to some extent, if not unequivocally, succeeded in this program.[100] Dr. Muir had observed unexpectedly low incidence rate among the coolies in Calcutta; the report was published in 'Leprosy Review' in 1930. Around 16,889 cases had been examined in which 159 or 0.94% were determined to have leprosy. To Muir, the incidence rate was supposed to be

[100] Knowles, *the Calcutta School of Tropical Medicine*, 82.

higher as numerous examinees did not appear for the clinical test. The reason was, probably, the fear of losing their jobs if they were proved to be leprous patients. Out of these cases, 39 were bacteriologically positive, 6 cases had the manifestation of acroteric lesions (A2 Type), and 114 had been treated on the basis of clinical evidence. In some areas of north Bengal, according to him, the incidence rate was as high as 6%.[101]

Supra-vital staining of the blood in leprosy was studied, along with the hydnocarpus preparations. Mr. N. K De, a chemist by profession, performed a great deal of chemical work regarding the acid-fast bacillus by using Shiga's technique which did not give desired result. From 1928 to 1931, the colonial Bengal witnessed the foundations of as much as sixty leprosy clinics.[102] In 1931, the Reports of the Survey Committees appeared, for example, the All-India Survey Party continued to work in Assam, Madras and Central India; In Midnapore district of Bengal, according to the report, 252 out of 449 villages were found infected and 793 people of 56,836 were examined. Another Committee surveyed the areas like, Tippera, Jessore, and Calcutta Municipality. The Gobra Leper Asylum, on the other hand, was converted into Leper Hospital in which the majority of patients entered 'voluntarily'.[103] Whatsoever, the following year appeared to be the most remarkable in the history of CSTM, because the Leprosy Research Laboratory of the School was transferred to the newly established All India Institute of Hygiene and Public Health; however, out-patient clinic had remained in the School premises. The number of leprosy clinics went up from 60 to 100. New areas like, Murshidabad, Pabna, Rajshahi, the higher educational schools, the industrial sectors, and the leper beggars in Calcutta emerged as

[101] E. Muir, "The Early Diagnosis of Leprosy," *Leprosy Review* 1, no. 4 (October, 1930): 5.
[102] Knowles, *the Calcutta School of Tropical Medicine*, 82.
[103] ibid, 83.

the main issues to the Department.[104] It is to be mentioned here that Dr. Sudhamoy Ghose, Professor of chemistry at the School, did exhaustive researches on the ethyl esters used in the leprosy treatment, before the Department got a chemist of its own.[105] The Report of the Leprosy Conference, held in 1920, Calcutta, avowed the fact that Sudhamoy Ghose prepared ethyl ester and recommended its use to Rogers. However, the experiment was gone wrong, as the injection of pure ester caused irritation in the tissues for which Rogers ceased to use this as medic.[106] Along with that, propaganda became an integral part of the research activities undertaken by Leprosy Department of CSTM. Under P.T.S program, numerous pamphlets, booklets for example Muir's '*Diagnosis, Treatment and Prevention*', pamphlets on '*Truths about Leprosy*' and '*What the Public should know about Leprosy*', had been distributed.[107]

This P.T.S was appearing to be so effective that the Leprosy Research Conference of 1932, held in Calcutta, intended to give importance on the inclusive and in-depth study of leprosy. The work of leprosy clinics, thus, should not be confined only to routine treatment but to survey, propaganda, and home visit through which the preventive measures could be taken with the cooperation of local people. The annual average cost of propaganda was 590 pounds.[108] Muir's research, entitled as '*Treatment of Leprosy: A Review*', was published in 1933. This article contains a detailed description of vaccination and serum inoculation, oral administration and injections of chaulmoogra oil, use of iodides, lepra reactions with evaluation of treatments, surgical removal of lepromata etc.[109] Meanwhile, in 1933-34, Dr. Muir's staffs, under the

[104] Knowles, *the Calcutta School of Tropical Medicine*, 84.
[105] ibid, 86.
[106] Chopra, *Indigenous Drugs of India*, 198-99.
[107] Sir L. Rogers, "History of the Foundation and the First Decade's Work of the British Empire Leprosy Relief Association," *Leprosy Review* 5, no. 3 (July, 1934): 109; See also *Leprosy Review* 1, no. 4 (October, 1930): 26 and *The Indian Medical Gazette* (Feb, 1933): 88.
[108] Rogers, "History of the Foundation," 109.
[109] Ernest Muir, "Treatment of Leprosy: A Review," *IJL* 1, no. 4 (October, 1933): 407-49.

supervision of Dr. Chatterjee, had intensively studied the cases registered at Bankura thana for seven or eight months. They had attempted to set up numerous self-supporting medical centers in the Burdwan Division.[110] Beside this, Dr Muir observed that the pathology of leprosy was exclusively studied by the researchers in CSTM. In some cases, the disease had been often more widespread throughout the body than it was thought at first sight. Thus, it led Muir to make his own conjecture that leprosy is essentially a disease of the reticulo-endothelial system (commonly known as Mononuclear Phagocyte System or MPS which plays crucial role in preventing the microorganisms like, mycobacteria, fungi, bacteria and viruses). On the other hand, apart from the researches, the leprosy surveys were continued in Rajshahi, Nadia, Dacca, and Howrah.[111]

After Ernest Muir, the Leprosy Department had already found his legatee in Dr. John Lowe, who came to the Department in 1931 and got the headship in 1935**.** He wrote numerous research articles on '*Rat Leprosy*', '*Sex Incidence of Leprosy'*, and '*Nerve Abscess in Leprosy'* in 1930s and 1940s.[112] Lowe had pointed out that men were much more susceptible to leprosy than women not only in India, but also in other advanced countries. The reasons were chiefly environmental, anatomical, and physiological. Differences in endocrine system of two sexes might have an impact on the susceptibility to leprosy. It was evident from the experiment that men's greater exposure to the environment increased the rate of vulnerability than that of women.[113] [114] On the other hand Lowe did a critical analysis on rat leprosy. Since the early years of twentieth century, the advancement of bacteriology, particularly in the field of acid fast germs and the developments in plague prevention works had compelled the bacteriologists to take 'rats'

[110] NL, *the 3rd General Report on 107 Health Circles in the Burdwan Division for 1933-34* (Alipore: Bengal Government Press, 1935), 9.
[111] Knowles, *the Calcutta School of Tropical Medicine*, 85.
[112] Das, "Leprosy researchers in the early years (1920s-1950s)," 25-27.
[113] John Lowe, "The Sex Incidence of Leprosy," *IJL* 2, no.1 (January-March, 1934): 57-71.
[114] Das, "Institutionalization of Leprosy Researches," T150.

as research samples in the laboratories. Lowe personally did the experiments on rats and made the following conclusion:

"…the only way of proving that any organism isolated from rat leprosy tissue is really M. leprae muris is to subculture it for a number of generations to exclude mechanical transference and then to produce experimental rat leprosy transmissible indefinitely in series…."[115]

During his tenure, the Indian Council of BELRA had organized a two weeks crash course at the CSTM for doctors who were in charge of leprosy centers. In 1935, 17 doctors from various parts of India had attended the course. The research work was carried out at Calcutta by CSTM and IRFA jointly at the association's expense which was a sum of Rs. 31,000.[116] Both Lowe and Chatterjee, in an effort to avoid surgical treatment, introduced an alternative way of treatment by using intradermal and subcutaneous injections in the affected nerves and tissues.[117] Still, they were doubtful about the diagnosis and pleaded with the leading doctors who might have better facilities, to make an exclusive study on this theme:

"We realize that the number of cases treated by us is small but we think that it would be a good thing if doctors who have better facilities for studying the effects of this form of treatment could be stimulated to do so."[118]

Some extraordinary cases were prudently examined at the Department. Chatterjee found two such unusual cases in the CSTM showing the leprous infection of early age which was later published as a brief report. One was the case of Kartar Singh, belonging to Punjabi '*hindu'*

[115] Lowe, "Rat Leprosy: A Critical Review of the Literature," *IJL* 5, no. 4 (1937): 466.
[116] See *Annual Report of the Public Health Commissioner with Government of India for 1935,* vol. 1 (New Delhi: Government of India Press, 1937), 184.
[117] Das, "Institutionalization of Leprosy Researches," T150.
[118] John Lowe and S.N Chatterjee, "Experiments in the Treatment of the Trophic Lesions of Leprosy by Injections of Hydnocarpus Preparations," *IJL* 6, no.4 (1938): 548.

family, who repeatedly complained about his anesthetic right hand. Initially, to Chatterjee, it seemed to be very odd as the incidence of leprosy in Punjab was not very high nor anyone of his family members had ever suffered from this disease. However, the answer resided in the case history of Kartar. His father was a signal inspector at Asansol of Burdwan province - a highly endemic leprosy zone. Kartar, till the age of ten, remained with his father. Probably, Kartar got infected from the coolies and mechanics of that area who often used to visit their house or from the woman who was occasionally taking him to her house or from one of his playmates. Chatterjee was of the opinion that though he was suffering from leprosy for thirteen years, his sound and balanced diet with active hard work prevented the infection to a large extent and confined it to a limited part of his body.

The second case was related to Anil Kumar Paul, a Bengali boy of poor health, who was a perfect example of C3 case suffering from leprosy for four years. He had also been afflicted by other diseases like malaria and scabies.[119] To Chatterjee, he might be infected through his father, who was a N2-C1 case carrying the germ for eight years. After analyzing these two cases, Chatterjee came to the conclusion:

"The type of disease (neural or cutaneous) which will develop depends approximately upon the general health of the infected and also on the number of bacilli which entered the body"[120]

In 1958, the article on '*Customs, Laws, Acts and Rules affecting Leprosy Patients of India'* revealed how far the stain of this disease was embedded into the Indian society, even after the independence. While criticizing the then Hindu Marriage Act of 1956, the Railway Act of 1890, the Motor Vehicles Act of 1939, and Life Insurance Rules, Chatterjee, in this article, had

[119] S.N Chatterjee, "The Age of Danger for Leprosy," *IJL* 3, no.1 (1936): 81-83.
[120] ibid, 83.

strongly condemned the way in which these Acts barred the leprosy sufferers and ousted them from the mainstream livelihood. A leprosy affected person was forced to conceal the disease in such environment as long as he could. This was another reason for their reluctance to leave the hospital after being declared fit for discharge. Chatterjee, demanding a new Act for guiding the public and medical professionals with reference to education, employment, and marriage of leprosy patients, advocated in favor of repealing those Acts.[121] Unless the laws as well as erroneous beliefs were rendered null and void or removed from the frame of mind by educating the people, the problem would remain up in the air. Hence, it would be more challenging to the leprologists to set a course through rehabilitating the patients.

Dr. Chatterjee had detected a newer type of leprosy case pertaining to eye appendages which were hitherto not widely known to the medical professionals; thus, it often led to wrong diagnosis.[122] [123] Similarly, Dr. Wade, with the assistance of CSTM staff, had embarked on a histological and clinical study of leprosy cases in Calcutta and Purulia in 1936. He took the biopsy materials of those cases to Philippines. In a personal transaction, Dr. Wade clearly stated the findings to John Lowe that a kind of mixed tuberculoid and lepromatous lesions were found in a leprosy patient of Purulia. By conforming Wade's observation, Dr. Lowe had recorded the similar findings amongst the leprosy sufferers appearing at the CSTM clinic in which at least 20 cases were of mixed tuberculoid type.[124] The report of BELRA, based on the information of provincial and state branches, showed that the hindrances of superstition in colonial Bengal was gradually diminished through the scientific research engineered at the Tropical School of Calcutta. This was indeed an achievement of CSTM reflected in the reports of the BELRA.

[121] S.N Chatterjee, "Customs, Laws, Acts and Rules Affecting Leprosy Patients of India," *IJL* 26, no. 2 (1958): 127-132.
[122] S.N Chatterjee, "Leprosy of the Eye and Its Appendages," *IJL* 15, no.3 (1947): 316-319.
[123] Das, "Institutionalization of Leprosy Researches," T150.
[124] John Lowe, "Mixed Tuberculoid and Lepromatous Lesions," *IJL* 8, no. 4 (1940): 515-16.

Throughout 1936, there were several attempts made to confirm the reports of successful cultivation made by McKinley, Soule, and Verder in the CSTM. Previously, McKinley and Soule, in 1932, had developed leproma suspensions in different media varying partial presence of oxygen and carbon dioxide with 40:10 ratios; they found 16 subcultures in eighteenth months and each case was acid-fast. The Leprosy Department of CSTM carried out this experiment in 24 series and thousand tubes of several media inoculated. Amongst them, half were brewed up in the usual way and half under the vaporous tension suggested by McKinley and Soule. The tubes were examined periodically over several months. Some of them formed a sort of macroscopic and considerable microscopic evidence of colony, but others under ordinary condition did produce less growth.[125] Apart from the development of leprosy research, the CSTM received more patients than ever. The GOB, in 1936, had decided to remit all sorts of supposed leprosy patients, chiefly the government employees, for the inspection to the concerned Civil or Presidency Surgeon. Often they had been referred to the officer-in-charge of the Leprosy Department of CSTM for additional diagnosis. The Annual Report of BELRA, appeared in 1946, showed that CSTM had entertained nearly 1,500 leprosy patients every year from entire Bengal amongst which many were seemed to come from railway, government hospitals, and industrial areas of the province.[126] [127] [128] During the Second World War, the army medical officers were trained in the diagnosis and treatment of leprosy. Almost 177 patients had been referred from

[125] H. Harold Scott, *A History of Tropical Medicine, vol. 1* (Baltimore: The Williams &Wilkins Company, 1939), 629.
[126] Kabita Ray, *History of Public Health: Colonial Bengal, 1921-1947* (Calcutta: K.P Bagchi & Co., 1998), 88.
[127] Das, "Institutionalization of Leprosy Researches," T150.
[128] Das, "Leprosy researchers in the early years (1920s-1950s)," 25-27.

military hospitals to the Leprosy Department of CSTM, of whom 126 cases were diagnosed properly.[129]

Thus, Dr. Dharmendra had argued that the competence or infrastructures to train the leprosy researcher, offered by the CSTM, were not to be exploited only by the Indian medical professionals, but by the researchers from outside India.[130] [131] [132] But, on the contrary, the Report of Bengal Public Health Department in 1940 presented a different picture; the work of CSTM was largely impeded by the undersupply of sufficient accommodation for the post-graduate students who were likely to pursue their careers as tropical diseases researchers. The GOB also criticized the way in which the research scholars were trained under each department, lacking a broad plan of action.[133] Whatsoever, Dharmendra, though the infrastructure of the institution was not so impressive compared to the Liverpool or London School, continued his research within this four walls till the mid-1950s.

Dr. Dharmendra, before entering the School in 1928 as an assistant researcher, had pursued his career working in two laboratories at Delhi and Simla. Being a Gandhian and ardent worker of the national movement, he intended to take leprosy as his field of specialization in 1935 and decided to join Leprosy Department of the CSTM. In his initial years, he studied clinical and epidemiological aspects of the disease.[134] While doing his research on lepromin test, Dr. Dharmendra got interested in the ancient '*samhita'* and '*smriti'* texts and terminologies regarding leprosy and tried to give references of ancient system of medications in the hypothesis

[129] See the Abstracts from the *Annual Report of the British Empire Leprosy Relief Association* (Indian Council), 1944 published in the *Indian Medical Gazette* (August, 1945): 425.
[130] Dharmendra, "Leprosy Research in India," 754.
[131] Das, "Institutionalization of Leprosy Researches," T150.
[132] Das, "Leprosy researchers in the early years (1920s-1950s)," 25-27.
[133] NMML, Private Paper section, B.C Roy Collection, subject file, 239, 1940.
[134] W. F Bynum and Helen Bynum (eds.), *Dictionary of Medical Biography, vol.2* (Westport: Greenwood Press, 2007), 414.

concerning the medical research on leprosy whenever possible.[135] The term '*kustha'* or leprosy and its medicinal treatments very often appear in those texts.

"In the descriptions of Sushruta we find a mention of the signs and symptoms by which we can feel sure that the description refers to leprosy as we know it today; there is also a mention of the treatment of leprosy with chaulmoogra oil, which has been our mainstay for the treatment of the disease even up to the present."[136]

The GOI had formed a committee to take into account the application to Bengal of the proposals contained in the '*Report on Leprosy and its control in India*' published by the Central Advisory Board of Health (CABH), GOI. Dr. Dharmendra was the Secretary of this Committee. Here, the CSTM was one of the agencies engaged in anti-leprosy work in the province and associated with the works of the Committee as well.[137] The CSTM had finally succeeded in getting rid of the tag of peripheral institution after 1947 and become one of the major medical research institutes in post-independent India. Dharmendra and his research crew had published their experiments in number of journals from 1950 to 1955. To prepare a substitute medicine in place of sulfone derivatives which had toxic component, Dr. Dharmendra and his group produced a drug using hydnocarpus oil and sulphetrone, which can be given intramuscularly, after diagnosing around 80 lepromatous cases, mostly in-patients, in the CSTM.[138] [139] [140] Many of them were suffering from chronic ulcers or eye complications or were subject to frequent reactions.

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[135] Dharmendra, "Leprosy in Ancient Indian Medicine," *IJL* 15, no.4 (1947): 424-428.
[136] ibid, 429; Das, "Institutionalization of Leprosy Researches," T151.
[137] NAI, GOI, File no. 11-5/46 P.H (I), Health Department, Public Health Branch, *the Annual Report of BELRA (Indian Council) of 1945*, 32.
[138] Dharmendra, Dey, Bose, & Kapur, "The Intramuscular Administration of Sulphetrone in the Treatment of Leprosy," *IJL* 18, no. 3 (1950): 309-31.
[139] Das, "Institutionalization of Leprosy Researches," T150-51.
[140] Das, "Leprosy researchers in the early years (1920s-1950s)," 25-27.

A critical note on 'Madrid classification' was written by Dharmendra, in 1955, addressing some terminological issues regarding leprosy. He intended to differentiate the two term 'maculoanesthetic' and 'indeterminate' macules by arranging them in a sort of continuous spectrum. With his associates, he had written an article on relative study of three antigens intended for lepromin test, in 1954, confirming that 'Dharmendra antigen' (DM) had been causing early positive reactions 'with the same frequency as the positive late reactions of the classical 'Mitsuda antigen''.[141] Indeed, this turned out to be an outstanding discovery in the leprosy research history.[142] [143] Dharmendra was appointed as the Director of the National Leprosy Control Program (NLCP) in 1955. Meanwhile, he systematized the forms of keeping records of treatments in leprosy centers of India. The therapeutic studies, in 1953, had included the sulphones, thiosemicarbazone, PAS, streptomycin, INH, and the hormones ACTH and cortisone.[144] The researches on hormones of the anterior lobe of the pituitary and of the adrenal cortex had produced two valuable drugs used in rheumatoid arthritis, hypersensitivity, allergic conditions, and inflammatory eye diseases etc. In some of the acute lepromatous cases, the ACTH treatment appeared to be essential but it gave temporary relief from pain. For Dharmendra:

"This method of treatment serves only to ameliorate the acute complications, and is not a treatment for the disease as such. There is need for great caution in the use of these hormones

[141] Dharmendra, Mukerjee & Khoshoo, "A Comparative Study of three Antigens for the Lepromin Test," *IJL* 22, no. 3 (1954): 311-21.
[142] Das, "Institutionalization of Leprosy Researches," T150.
[143] Das, "Leprosy researchers in the early years (1920s-1950s)," 25-27.
[144] NL, the *Annual Report of the Calcutta School of Tropical Medicine (CSTM) and Carmichael Hospital for Tropical Diseases 1953* (Alipore: West Bengal Government Press, 1955), 31-129.

since they are known to mask the symptoms and lower resistance to infection; the treatment should never be prolonged and minimal effective doses should be used."[145]

It is to be noted that ACTH and cortisone, used with discrimination with the knowledge of their limitations and probable dangers, would provide a valuable method of treatment for certain acute complications of leprosy. Moreover, it was medically endorsed that BCG vaccination produced lepromin positivity continued longer than that of tuberculin positivity.[146] Previously, the positive serological reactions in leprosy patients were specified as evidence of co-existing syphilis. Simultaneously, though in reality after reassessing the recent developments of pre and post anti-syphilitic (penicillin) therapy, it was finally attained that leprosy itself might be responsible for such positive reactions. This investigation had been performed in association with Dr. Venkataraman, the serologist to the GOI.[147] All out-patients, including non- lepromatous cases at the Leprosy Department of the CSTM, were treated with several serological tests for syphilis where the lepromatous cases were found to be more susceptible to the syphilis in contrast to the non-macular cases.[148] On the other hand, more medical personals had undergone leprosy training courses frequently. For instance, the leprosy training course, held from 15th July to 14th August, 1953, under the directives of Hind Kusht Nivaran Sangh (Indian Leprosy Association), had been attended by 27 doctors in whom 15 were from West Bengal. There was a steady increase of the leprosy patients in the school in the initial years of independence; in 1950, the number was 2,479 escalated to 2,900 in the following year and reached at 3,395 in 1953. The average attendance

[145] Dharmendra, "A.C.T.H And Cortisone in the Treatment of Acute Complications of Leprosy," in *IJL* 21, no. 2 (1953): 214.
[146] R. kooij and A.W.F Rutgers, "Leprosy and Tuberculosis: A Comparative Study with the Aid of Skin Tests with Tuberculin, Killed BCG and the Dharmendra Lepromin in South African Bantus," *IJL* 26, no. 1 (1958): 24-48; Also see *the Annual Report of CSTM 1953.*
[147] *See Annual Report of the Calcutta School of Tropical Medicine and Carmichael Hospital for Tropical Diseases 1953,* 34.
[148] ibid, 130.

altogether including the other leprosy clinics in Bengal for treatment was about 900 per week and the total appearance was over 44,262 for the year 1953.[149]

Conclusion

The establishment of the CSTM, as one of the prior and leading Tropical Diseases Research Institutes, was a feather in the colonial cap, amplifying the need for research in colonial medicine from the early years of twentieth century. Helen Power has rightly pointed out that this School had been borne out of combined effort; the GOB and GOI, the Indian medical professionals, and IMS officers were related to this institution from its commencement.[150] There should not be any disagreement on the fact that the leprosy research in periphery crystallized only after the foundation of the CSTM. The foremost obstacle, affecting the leprosy research, was the problem of funding both from GOI and GOB, even in occasion Indian Council of BELRA was unable to provide the financial aid for the research programs organized by the faculties.[151] However, there were other issues largely non-medical, crystallizing the problems of tropical diseases research in British India. These problems were purely administrative. In 1919, the administration of CSTM was put in the list of provincial issues under GOI Act, buttressing the discourse that British government had intended to retain the control over colonial public health system in India without taking liabilities of the medical research institutes which had been serving the colonial interest of producing 'tropical men' in the field of bacteriological research since the foundation of LSHTM or LSTM. This was due to growing abhorrence amongst Indian medical professionals against the form of engagement in the existing medical realm more than that of opposing the means of colonial medicine. During the early decades of the twentieth century, the increasing professional

[149] *See Annual Report of the Calcutta School of Tropical Medicine and Carmichael Hospital for Tropical Diseases 1953,* 131-132.
[150] Power, "The Calcutta School of Tropical Medicine," 199-200.
[151] Das, "Institutionalization of Leprosy Researches," T151.

pressure from the university based physicians of India, who systematized the non-governmental medical professions, made the GOI to ruminate about the inclusion of Indians in the colonial service.[152] The faculty of Leprosy Department in CSTM started to be 'Indianized' from mid 1920s which got momentum in 1930s and 1940s in the period of high politics. Rogers sought to establish an 'Imperial Tropical Institute', i.e. CSTM, in India to consolidate the colonial forms of medical knowledge through the recruitment of European members of the IMS. The monopoly of IMS over the colonial medical research in India was, nonetheless, sustained by racializing the institutes when the Indians had been already stepping into the world of bacteriology. The appointment of Sudhamoy Ghose in the CSTM might be one of the earliest examples. Before the First World War, the leading medical research institutes and other university professorships in India were occupied by British IMS officers (Civil).[153] In case of CSTM, the initial appointments for the academic posts were European IMS officers; even, most of the researchers in the institution were British. When the colonial government thought to recruit an Indian assistant surgeon at the CSTM, Rogers fiercely opposed the move by saying that it would put the future of the School in 'grave danger'. Though, he was an influential figure in tropical medicine and a staunch critic of the Indianization of the IMS, his apprehension about the future of tropical medical research was to some extent fostered by the nationalist politics in India, the insulated laboratory researches in hill stations and the way in which colonial medicine and public health practiced by the British had come under the purview of political criticism. Thus, Rogers's

[152] Waltraud Ernst, "The Indianization of Colonial Medicine: The Case of Psychiatry in Early Twentieth Century British India," *NTM Zeitschrift für Geschichte der Wissenschaften, Technik und Medizin*, 20, no. 2 (2012): 61-89; See Helen Power, "The Calcutta School of Tropical Medicine," 199-200; Saurav Kumar Rai, "Indianization of the Indian Medical Service, c. 1890s-1930s," *the Proceedings of the Indian History Congress* 75 (2014): 826-32.

[153] See Aparna Basu, *the Growth of Education and Political Development in India, 1898-1920* (New Delhi: Oxford University Press, 1974), 2-4; Anil Kumar, *Medicine and the Raj: British Medical Policy in India, 1835-1911* (New Delhi: Sage Publication, 1998), 1-9.

opinion for de-Indianizing IMS and acquiring the CSTM as All India Research Institute was a lone voice in the wilderness.[154] [155]

The problem of sequester research did not wane entirely after independence. IMS affair was brought to an end with new institutional development. The ICMR, from 1953 in association with the Rockefeller Foundation Fellowships, financed medical research in India and established several research units in the metropolitan cities. This newly refurbished organization claimed in its 1957 report that the medical research was no more confined to the laboratories, as it was in the times of Raj; instead it began a new epoch of collaborative inquiries by incorporating the medical colleges and institutions into the research program. In spite of building an environment with such optimism, ICMR failed to outrun the colonial hangover in constituting the research in medical science in India, espousing the tenet of 'spatial exclusivity' and advantages tacitly. The sense of buoyancy, though, was found in the Report of the Bhore Committee where the British medical system had been criticized for its lack of cohesiveness and it should be replaced with an idea of pervasive and effective support to the medical institutions expediting scientific investigations. The foundation of the All India Institute of Medical Sciences (AIIMS) aimed to testify the recommendations of Bhore Committee.[156] Even after all these cravings, the objective of medical research had remained urban oriented ignoring largely the rural sectors. Thus, the metropoles became the site of 'real privilege and power in postcolonial India'. The CSTM, while facing similar trajectories, intended to surpass the structural limitation, imposed over the institution, by establishing the rural units for leprosy diagnosis. Disease investigations, inclusive programs regarding the prevention of leprosy and the institutional researches were being

[154] Power, "The Calcutta School of Tropical Medicine," 212-14.
[155] Das, "Institutionalization of Leprosy Researches," T151.
[156] Chakrabarti, *Bacteriology in British India*, 84.

systematized by the co-ordination of ground level leprosy workers and leprosy researchers. But, it seems that the medical protagonists dealing with tropical diseases were often enmeshed sometimes exasperated within colonial orientation. Some of them had no pellucid idea about the future plan of actions to rehabilitate the leprosy patients after proper diagnosis. Ernest Muir still believed that segregation, in a 'humane' way, was the only means to ward off the contagion.[157] In an interview of 1984, Dharmendra expressed his denial concerning the eradication of leprosy in India. To him, MDT could not alone stamp the disease out of the developing countries, unless the government would take an inclusive public health program to aware the general populace about the way in which the germs are transmitted through blowing noses and indiscriminate spitting. Dharmendra was not satisfied with the postcolonial governmental scheme on leprosy prevention.[158] It, however, shows the fact that leprosy researches, in colonial or postcolonial India vis-à-vis Bengal, were institutionalized more to understand the 'tropicality' of the disease or how far it was a 'tropical danger', if not imperial, to the government rather than comprehending the socio-cultural encounter and its changing nature towards leprosy. Muir's P.T.S program ultimately led to nothing but absolute disappointment because the process itself was relied on structural limitations of colonialism. Moreover, the misappropriation of the system of scientific investigation turned the sole purpose of medical research from providing basic public health facilities, to people, into creating a 'medical empiricism' which eventually appeared to be infallible in nature. Such truism affected the procedures of diagnosis, surveys, and propaganda adversely. The supposed 'tropical men', i.e. Manson or Rogers, were not being able to escape from this 'scientific truism'.

[157] Stephen Snelders, *Leprosy and Colonialism: Suriname under Dutch Rule, 1750-1950* (Manchester: Manchester University Press, 2017), 161-199.
[158] Taken from the interview given by Dr. Dharmendra and later published as "An Autobiographical Sketch," in *the Indian Leprologists Look Back,* ed. S.S Naik (Bombay, 1990), 3-11; The tape was received on July, 1984.

The voluntary organization like BELRA had to work under the directives of British government. Some scholars have pointed out that, to compensate the negligence of colonial state in promoting effective public health programs, these voluntary organizations played a pivotal role, in some cases better than that of British Raj, in promulgating the awareness amongst people. It is true that Health Department of GOI or GOB had certain difficulties in carrying out public health work at the district or village level. People, contemplating the health propaganda of government as political pursuance, were suspicious to the lectures/demonstrations of health officials. Instead, the works of voluntary organizations seemed to be more consistent and acceptable to the people who had been mobilized considerably in the health campaigns. Thus, these associations gradually transformed the nature of the reform movements in the rural India by integrating popular participation into the local affairs. However, the scholars have ignored the inner dynamism of coloniality and cultural encounter which were subtle in the functioning of such charitable organizations. This is rather problematic to put all voluntary organizations into a single monolithic group paying little attention to the differences in nature of works.[159] The intention of BELRA or Mission to Lepers, shaped by the prototypes like, the idea of 'civilizing mission', oriental discourse of enlightening the colonial subjects, and publicizing, if not 'popularizing', the superiority of colonial medicine, were entirely poles apart from the purposes of indigenous voluntary organizations. The Birnagar Palli Mandali (1923), Central Co-operative Anti-Malaria Society (1919), Saroj Nalini Dutta Memorial Association (1925) and Bengal Social Service League (1915) would have aspired to initiate an anti-colonial movement, which helped in materializing a counter-cultural hegemony of nationalist *bhadraloks*, through public health

[159] Kabita Ray, "Voluntary Associations and Public Health in Bengal 1900-1947," in *History of Medicine in India: The Medical Encounter*, eds. Chittabrata Palit and Achintya Kumar Dutta (New Delhi: Kalpaz publications, 2005), 328-36.

works.[160] To some extent, these voluntary organizations served as appliance of nationalists to indigenize and 'Indianize' the public health system.

Another issue that needs to be analyzed here is the way in which drugs were prepared, rather perceived or objectified, in the laboratory of Leprosy Department of CSTM. Despite being a colonial institution meant for tropical diseases research helping to disseminate the ingenuity of western medicine in India, the CSTM and its Leprosy Department had to delve into the chemical compositions of indigenous drugs, for instance chaulmoogra oil, to use them as the model of preparing new medics. The extensive researches, regarding the administration or the derivatives of this oil, upheld the colonial proficiency over the indigenous medicine. As David Arnold has pointed out that the shift in medical knowledge, from indigenous to western, had spawned an incessant brawl between the '*native*' medical service providers [sometimes labeled as '*quacks'* by the allopath] and the physicians trained in western medicine from the late nineteenth century.[161] To the researchers, contriving with tropical medicine, the indigenous drugs were not triggering much trouble in medical research, instead, the colonial officials had been keener to classify the drugs used as formal medications in pre-colonial South-East Asia and to cataloguing them according to their productivities. What worried the colonial researchers most was the 'irrationality', which was an acceptable genre in the pre-British medical realm, behind prescribing such drugs. The inadequacy in institutional research, the absence of 'reason', and unpretentious way of treatment without knowing the inner complexity of drugs were off the wall to the practitioners of western medicine. For this, the colonial medicine had brought, often problematized, the institutional leaning in the research by stranding the supposed pre-colonial

[160] Kabita Ray, "Voluntary Association and Public Health in Bengal 1900-1947," 328-36.
[161] David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-Century India* (California: University of California Press, 1993), 30-42; and *The New Cambridge History of India, Part 3, Vol.5, Science, Technology and Medicine in Colonial India* (Cambridge: Cambridge University Press, 2000), 2-10.

unreason in an uncanny way. Hence, chaulmoogra was, eventually, transformed into 'hydnocarpus oil' which appeared to be scientifically more robust and culturally colonized. Professionalization in western medicine refabricated the aim of scientific exploration when the colonial government sought to develop Indian drug industry after the Central Indigenous Drugs Committee (CIDC) was set up in October, 1895.[162] The 'hegemony-oriented creation of knowledge', what Anil Kumar is trying to argue, was enforced by subverting the pre-colonial exploratory model of 'curiosity-oriented research'.[163] But, the manner in which the former had been articulated did not always get to be shaped in a linear way. The colonial forms of knowledge were inquisitive in nature and preoccupied with ritualizing the indigenous systems of inquest, simultaneously, it created a room to converge the scientific ideas by providing little space to thrive. Hence, the inherent intrusiveness of colonialism was often represented with a hegemonic blend. This adds a newer dimension to the analysis of indigenous drug research. The approval and disapproval of bazar medicine were dependent upon this 'truth', i.e. to what extent the institutionalization of colonial medicine was allowed to be encountered with indigenous drugs. Whatever the situation or the fallacies were, shaped by colonial subtlety and perceptions, the Leprosy Department of CSTM had carried out extensive works during 1920s to 1950s, contributing in the field of leprosy research, however, this has recently become non-operational. Leprosy has resurfaced again as new public health problem in India. For instance, nine leprosy patients were identified in one of the villages of South 24 Parganas, West Bengal, under Leprosy Case Detection Campaign (LCDC) program of 2017, unveiling the rarity of leprosy research, of social awareness campaigns, and of observing both the prevalence and incidence rate in recent

[162] Anil Kumar, "The Indian Drug Industry under the Raj, 1860-1920," in *Health, Medicine and Empire: Perspectives on Colonial India*, eds. Biswamoy Pati and Mark Harrison (Hyderabad: Orient Longman Ltd., 2001), 358.
[163] ibid, 379.

times.[164] In 2014-2015, according to the LCDC Report of 2016, approximately 1, 25,785 new leprosy cases had been detected in entire India.[165] Thus, to contextualize or situate the CSTM's contribution in leprosy research, within the British Empire, it should be viable to investigate the period between 1920s-1950s – the heyday of Leprosy Department of CSTM- attaining its crest with the beginning of National Leprosy Control Program (NLCP) 1955.[166] [167]

[164] A survey was conducted by the District Health and Family Welfare Committee, South 24 Parganas, West Bengal under the auspices of LCDC Program of 2017, during 6th - 9th November, 2017 wherein nine leprosy sufferers were identified in the rural area of South Khargachi, P.O- Govindapur, Police Station -Bhangar, South 24 Parganas, Pin-743502. Amongst them, five patients were above 50 years. I would like to thank Mr. Mamtajul Haque Laskar, who is still working as a Para-teacher of Bodra High School and his wife Mrs. Momotaz Bibi, who was ICDS (Integrated Child Development Services) worker during this survey, providing me necessary information regarding the status of LCDC Program in their village. Due to the unavailability of ASHA workers, they are still assigned to this program in the district level.

[165] See *the Report of LCDC, 2016.*

[166] Das, "Institutionalization of Leprosy Researches in Calcutta School of Tropical Medicine (CSTM) and other Programmes from 1920s to 1950s," T151-52.

[167] Das, "Leprosy researchers in the early years (1920s-1950s)," 25-27.

CHAPTER 5

Nationalizing the Disease: '*kustha cikitsha'* and '*kustha rogi'* in Bengali Vernacular Print Media and Health Periodicals, c. 1880 to 1955

"Means should be adopted by Government for checking the spread of leprosy. It should, for that purpose, establish leper asylums and make a law compelling lepers to remain there. These asylums could be situated at the extremities of towns and villages and should be placed under the management of municipality in the head-quarters of a district or of the District Board."[1]

Navavibhakar Sadharani, on 15th April, 1889

"The Government has…to take up the leper question at once. Government has overlooked this subject for a long time, and is solely responsible for the spread of the disease in the country. In the interests of the public government should pass a law prohibiting the appearance of lepers in the public streets."[2]

Gauhar on 20th December, 1888

These hues of requests to protect the 'public' from 'lepers' and to confine the affected in the asylums or elsewhere supposed to be considered as a 'majoritarian' outlook of the Bengali '*samaj'*[3] regarding the 'leper' problem that had ever been so scrupulously discussed. The British government in India, however, was willing to introduce a new bill related to the 'lepers'; nonetheless, the editorials, reports, and articles written by the Bengali *bhadraloks* on this issue,

[1] See The National Archives, Kew (NAK), Indian-Language Papers, Government Papers, Bengal Newspaper Reports, 1889. Accessed [July 02, 2019].
http://www.ResearchSource.amdigital.co.uk/Documents/Details/INR_Part1_Reel11_Vol1
[2] ibid.
[3] The term '*samaj*' is a sort of transliteration of 'society', but it does not carry the similar expression. *Samaj* is more complex form of idea usually applied to explain the relationship between the social trajectories and the individuals in the Indian subcontinent.

in the contemporary newspapers or medical periodicals, were taken into account with sheer importance. It implies that the opinions of medical/non-medical Bengali professionals were sort of moral consents to the Raj in dealing with the 'leprous bodies' in India. On 12th June, 1889, the *Sahachar*, after viewing the contagious nature of leprosy and the existence of large number of people suffering from that disease, had put forward a few suggestions to the government in implementing measures to prevent its progress. The first step would be taken in this direction to detain the pauper and helpless 'lepers' in the asylums while keeping the sexes separate in such institutions; simultaneously, the leprosy sufferers belonging to the wealthy families were to be confined in a similar way. Even, *Sahachar* was of the opinion that initially the measure caused hardship, but gradually 'the people will get accustomed to it'.[4]

Not all contemporary Bengali newspapers had shared this analogous point of view. Few of them, who believed in the restoration of the 'purity of body', had criticized the way in which the '*hindu* lepers' had been treated in the '*mleccha*' asylums. The *Dainik O Samachar Chandrika* on 17th June, 1889 issued a note of dissent against the forcible detention of leprosy affected in the asylums which in turn led to a great deal of oppression. As far as the '*hindu*' sufferers were concerned, there was hardly any space to perform their rituals in the asylums. Moreover, the '*hindu* lepers' had been already experiencing the consequences of the sins they had committed in their previous births; thus, the government coerced the '*hindus*' to commit more sins by restraining those sufferers forcefully in the '*mleccha'* asylums.[5] *Samvad Prabhakar*, in its issue of 24th June, 1889, had also disapproved some of the provisions of the Leper Bill, such as, the compulsory detention of 'leper beggars' and their families in an asylum by the police, although,

[4] See NAK, Indian-Language Papers, Government Papers, Bengal Newspaper Reports, 1889. Accessed [July 02, 2019].
[5] See NAK, Indian-Language Papers, Government Papers, Bengal Newspaper Reports, 1889. Accessed [July 02, 2019].

it did not discard the entire proposal. To *Prabhakar*, the colonial government should prevent the 'leper beggar' from begging publicly and impound those sufferers only who were poor and had no one to take care of them.[6] The incongruous points of view on the leprosy problem in the British Raj, presented by these vernacular newspapers, were to some extent related to and imbibed with the emerging ideals about the manifestation of 'healthy body, healthy state', though, the approaches had been quite different. It appears from the editorials that the Bengali '*samaj*' was sympathetic toward the leprosy sufferers; but, while believing in utilitarian ethics, this '*samaj*' might be more inclined to the defense of its outer structure, i.e. '*atmarakshya*' from possible intrusion of microbes. For this, since nineteenth century, the Bengali medical and '*Ayurvedic'* journals, newspapers, pamphlets, texts, and manuals on contagious diseases [including leprosy] were largely responsible for disseminating the various therapeutic mechanisms or '*cikitsha'* that could protect both individual and society simultaneously from the diseases. The horizontal and vertical transmission of contagion or '*sankraman*' could be inhibited by either procuring medicine, i.e. '*aushadh*' or ensuring proper diagnosis (*sathik cikitsha*) that eventually created a medical culture within the Bengali *bhadraloks*.

In reality, such '*daktari*' culture might not only be persuaded by the western medical authority of the practitioners or physicians, rather, it contained the South Asian pre-modern medical ethics that were invading the 'secularized' private domain of *bhadraloks* even while the apparent division of inner/outer sphere continued to be functioning. Besides the popularization of '*daktari*' texts and the vernacularization of colonial medicalism, the emerging Bengali '*bhadralok daktars*' often equated themselves with the nationalist impulse of eliminating the British domination. This compulsion, which was more cultural than political in nature, seemed to

[6] See NAK, Indian-Language Papers, Government Papers, Bengal Newspaper Reports, 1889. Accessed [July 02, 2019]. ibid.

be reflected in the narratives that had been published along with the promotion of pharmaceutical products in the Bengali newspapers and medical journals, claiming the 'complete cure from the diseases' (*sompurno rogmukti*). Such prophecies, related to both curative and prophylactic models, were likely to be induced by a kind of *idée fixe* that followed an exclusive objective of promulgating nationalism. As if, the 'germed bodies', which could only be removed through the suitable 'Nationalist' cure, appeared to be the representations of the colonial rule. It seems that the political thread regarding the public health of the Raj in the twentieth century was mostly based on this encounter, having anti-colonial narrative. The diseased or '*rogi*' was no more considered as indisposed body, but a community of ailing people who must be brought under '*sathik cikitsha*'. Eventually from late nineteenth century, the '*daktari*' culture which had incessantly distanced itself from popular forms of medical treatments, for instance the 'other' ways of diagnoses, except '*ayurvedic',* '*hakimi*', and homoeopathic medications, were systematically put within the subaltern remedies or healings.[7]

Therefore, the emerging medical vis-à-vis pharmaceutical market in colonial Bengal was entirely founded on the '*daktari*' culture appropriated by *bhadralok* domesticity that produced a new cultural facet, i.e. *grihasta daktari cikitsha*. Likewise, the leprosy treatment or '*kustha cikitsha*' had developed into one of the concerns of Bengali '*samaj*' during this process of medical formalization. This chapter will contend with the various ways in which '*kustha cikitsha*' and the cures or '*niramoy*' appeared to be discussed in the myriad Bengali medical and non-medical periodicals, newspapers, manuals, texts, and journals. How far did the manifold '*daktari*' treatments shape the Bengali conscience regarding leprosy? Did it conform to the colonial medicalism that had been highly preferential in nature and objective in spirit? To what extent had

[7] Projit Bihari Mukharji, *Nationalizing the Body: the Medical Market, Print and Daktari Medicine* (New York: Anthem Press, 2009), 111-120.

the '*kustha rogi*' turned out to be a socio-moral threat to the Bengali '*samaj*'? In this regard, the concept of '*samaj*' would be closely linked with the following analytic framework that intersects both the cultural belief of nationhood embedded in the indigenous thoughts and the political discourse of nationalism crafted along with the colonial modernity. Nonetheless, a major problem in theoretical orientation is whether '*samaj*', which is not mere a Bengali expression of society/culture but can be aptly inferred as 'social response', had succeeded to retain its eccentricity amid the acculturation in the nineteenth century or '*rashtra*' (state) involved itself in engendering the idea of social order, especially in respect to the contagion. As Swarupa Gupta has pointed out that in colonial Bengali rhetoric, the domain of '*samaj*' and '*rashtra*' had traversed in such a way through which the socio-cultural essentials of idealizing the 'Nation' in the 'inner' realm was entwined with the applications of politics and identity formation in an 'outer' world.[8] This surmise has, although, been ignored in the identification of 'diseased', who being the part of the society thus far were culturally objectified as a community outside '*samaj*'. Nevertheless, they continually had been wiretapped by the '*rashtra*'. This chapter has also problematized such leaning that so far is unaddressed in the existing literatures.

'*Sankraman*', '*Samaj*', and '*Sarkar*': Nationalism and its Role in Making of Medical Culture

The notion of 'contagious nationalism' is bringing in newer understanding to the study of the nationhood and how it came to be imagined, shaped, and presented by the 'civil' society of a colonized state in the course of its encounter with the Eurocentric 'scientism'. In words of John Plamenatz, nationalism is chiefly a cultural phenomenon which may often take a political form. The desire for conserving or augmenting a specific cultural identity, when it is under threat, is

[8] Swarupa Gupta, *Notions of Nationhood in Bengal: Perspectives on Samaj, c. 1867-1905* (Leiden: Brill, 2009), 1-4.

the precondition of imagining the 'nationalism'.[9] However, the way, in which this emotion was ultimately espoused in the British Raj and delivered by the political elite, needs to be explored assiduously. What Plamenatz thought about nationalism, which is manifested through the cultural representation of a community, is to great extent a derivative and invented discourse. To the scholars, the trajectories of 'cultural nationalism', generating a sense of bigotry amongst the early nationalist leaders, are entirely different from the functioning of 'national culture'. The 'national culture' has consolidated the contested identities, the real and imaginary precincts, the historical past and ethical being, manipulating the national movements during the colonial period; whereas, the 'cultural nationalism' has become an instrument to define the political contour of a nation in morbid, intolerant, and discriminative terms.[10] Thus, the idea of kinship, that encompasses assorted existences such as 'communal', 'regional' and 'national', has been mutated into the concept of 'unanimity' in the sphere of 'cultural nationalism', excluding the 'other' forms of dialogues that do not reconcile with the fermented 'national imagination'.

Since the late nineteenth century, the political contestation in the Raj had been often dominated by the cultural strife existing between the British *sahibs* and Hindu *bhadraloks*. This antagonistic relationship too did affect the colonial fiber of public health. Therefore, the archaeology of cultural nationalism in India had constructed certain 'myths' or 'motifs' that both reflected the ingenuity of '*hindu* trait' and the menace from '*mlechhas*'. Within the process of racialization, there would be much higher probability of '*sankraman*' from '*mlecchas*' that caused racial impurity amongst the colonized as well, although, this 'contagious nationalism' was also ready to disavow the 'diseased' even if they belonged to the '*hindu* trait'. The cultural specificity and

[9] John Plamenatz, "Two Types of Nationalism," in *Nationalism: The nature and evolution of an idea*, ed. Eugene Kamenka (Canberra: Australian National University Press, 1973), 22-24.
[10] Sadanand Menon, "From National Culture to Cultural Nationalism," in *On Nationalism,* eds. Romila Thapar, A.G Noorani and Sadanand Menon (New Delhi: Aleph, 2016), 110-111.

its prolific presence in the contagionism, providing a tangible shape to the anti-colonial narratives that frequently reminded of racial susceptibility and immunity to the disease. Altogether it was the impulse, residing in the 'rationale' of Bengali '*samaj'* and fabricating the nationalist imagination of '*swasthya*', that had transgressed the frontier of '*desh*' (the nation), '*kaal*' (the time) and '*patra*' (the community). The making of Bengali social psyche in the late colonial phase, thence, was the response which baffled the supposed contrariety existing between the political entity, i.e. '*desh*', and the social tutelage, i.e. '*samaj*';[11] when there was an issue of public health or '*jana-swasthya*', both these terms were frequently used by the Bengali periodicals in explaining the vitality of 'national health'. Here, the social aphorisms, ignoring the inherent refinements of kinship, had prevailed over the individual allegiance to the community or '*gosthi*'. In the colonial form of governance, the society, which intended to differentiate itself from the state, played a multifarious role in defining the superficial identity of an individual.

The *Gesellschaft* or the 'society' could be comprehended as a sort of political conformity which depends on the popular assents to the public laws and directives, whereas, the *Gemeinschaft* or the community, is more associated with the familial linkages, customs, values, and cultural union than the 'social agreement'. To Ferdinand Tonnies, the 'society', which has no such 'unifying characteristic', is the involuntary system of compliance that negates or modifies the exclusivity of community.[12] The theory seems plausible in explicating the features of western societies where the division of 'society' and 'community' is more explicit; in case of colonized states, the '*samaj*' functioned rather independently from the community and state, though in some instances such as public health, the '*samaj*' sometimes proceeded as one of the partisans of colonial state.

[11] Sudeep Chakravarti, *The Bengalis: A Portrait of a Community* (New Delhi: Aleph, 2017), 2-6.
[12] Ferdinand Tonnies, *Community and Society* (New York: Dover publications, 2002), 33-65; this text was first published in 1887.

So far the numerous prophylaxes related to leprosy treatment, ranging from '*ayurvedic*' to allopathic, were 'rationalized' in the late colonial Bengali medical journals, the axioms of '*samaj*' about the 'nation's health' (*desher o dasher swasthya*) seemed to be ensconced in and prioritized by those narratives. This '*desh-samaj*' continuum has mystified the post-colonial understandings about 'nationalism' and its manifold ways of application. Since the decolonization, the territorial displacements of the communities in South-East Asia have regenerated the arguments whether the perplexed emotional tie to the community is much higher than that of nation. However, there would be other tortuous approaches in the people's encounter with the emerging 'modern medicalization' in the British India apart from the '*desh-samaj*' premise.

During the Raj, the delineation within the indigenous or 'traditional' ways of diagnoses in terms of their alleged religious affiliations had been much prominent, for example the '*unani- hakimi*' medication was easily identified with the Islamic therapeutics in contrast to '*ayurvedic*', which was supposed to be related to '*hindu*' remedies and scriptures. Neshat Quaiser is of opinion that the 'modern medicine', which was responsible for creating '*Doctory Raj*' in India, had extricated whatever appeared to be 'aberrant' in the pre-colonial treatments. In the nineteenth century, the '*unani-tibb*' (unani medicine) was undergoing a sort of uncertainty while facing the political challenge from the colonial medicine. This ambivalence asserted itself concurrently in the self-appraisal on the one hand and in an affirmation of experimental, objective, and logical perseverance of '*unani*' system of knowledge on the other. Moreover, the reductionism in 'modern' medicalism, treating the bodies as a separate clinical object, had been fervently criticized by the *reformist* practitioners and users of '*unani*' who were ratifying a fundamental relationship between 'man, nature and soul'. To Quaiser, the manuals on '*Tibb-i-Islami*' (Islamic

medicine) and '*Tibbul Arab*' (Arabian medicine) were largely followed in preparing the contemporary Unani texts during this period, at the same time, the critiques of modern '*Doctory Raj*' had not only resisted against the 'scienticisation' of the human body and the colonial endeavor in hegemonizing the western cultural conscience, but also constructed the discourses, stereotypes, and typecasts of the 'West' in these newly published Unani texts.[13] This surmise, although having discrete approach to analyze the other way round, is mostly influenced by the Saidian concept of 'Orientalism'.[14]

Similar contention regarding the evolution and acceptance of '*ayurveda*' in the twentieth century colonial and early postcolonial north India has been put forward by Rachel Berger. The scholars have hitherto interpreted '*ayurveda*' in the Raj by paying no heed to its biomedical aspect and the way in which its expansion, development, and reception were determined with the changing political settings. To Berger, it was the emphasis over dependable indigenous 'past' with symbolic appeal that isolated '*ayurveda*' from the greater processes of making 'history' in the subcontinent. The unyielding structures and micro-avenues of western (allopathic) biomedicine were unable to fascinate the local consumers who trusted more on the holistic diagnoses of '*vaids'*. Since 1919, the government of United Provinces (UP) and later the post-independent Uttar Pradesh had gradually shifted the considerations from the implanted colonial reluctance to recognize the indigenous medical systems as rightful scientific medications by modernizing the '*ayurvedic*' medicine for the 'nationalized' consumers. Therefore, the early public health infrastructure of the British Raj was either defied or revised by the newly configured regional 'power, authority, and agency', especially in UP. From 1920s onwards, the sovereign medical

[13] Neshat Quaiser, "Politics, Culture and Colonialism: Unani's Debate with Doctory," in *Health, Medicine and Empire: Perspectives on Colonial India*, eds. Biswamoy Pati and Mark Harrison (New Delhi: Orient Longman, 2001), 317-321.
[14] Edward W. Said, *Orientalism: Western Conceptions of the Orient* (New York: Vintage Books, 1979), 1-10.

governance in the provinces founded numerous colonial institutions abided by the regional politics. Thus, provincialization of medical needs was far more predisposed to the local construal of concerns of 'religion, ethnicity, language, class, and caste' which characterized the framework of health politics than reacting to the anti-colonial ideology that outlined major political schemes.[15] This leads to another point of departure, dealing with the role of 'indigeneity' in popularizing the indigenous medicine. There were initiatives embarked on by European and Indian drug manufacturers respectively to forge a place for selling their products in the market; in such case, the advertisements in the newspaper and medical periodicals would be the expedient medium in promoting the efficacy of the products.

Madhuri Sharma has pointed out, while contextualizing colonial Banaras in her study, that the western medicine could not entirely supplant the indigenous medical system, instead it managed to coexist with the other 'traditional' ways of treatments by retaining a hegemonic position. As the western medical entrepreneurs unsurprisingly were in favorable standing within the colonial rule, the pharmaceutical markets in the British India appeared to be functioning under the mandate of those companies, manufacturing mostly 'allopathic' drugs. There had been other practitioners in the market, closely associated with the indigenous medical system, intended to make traditional '*dawai*' for the consumers. It shows that the indigenous medical professionals had devised a parallel and separate line of work 'equivalent to the allopathic system' during the twentieth century. In these circumstances, to Sharma, it is rather difficult to appraise the extent of 'professionalization' in medicine on the basis of binary concept, i.e. indigenous/western or Indian/European. Both the western and indigenous medicine manufacturers have had a common 'medical market' wherein the customers were considered no more than the 'diseased bodies'.

[15] Rachel Berger, *Ayurveda made Modern: Political Histories of Indigenous Medicine in North India, 1900-1955* (Basingstoke: Palgrave Macmillan, 2013), 1-23.

Even the '*vaids'* and doctors were engaged in a *mêlée,* exerting a pull on a 'wider clientele for their respective medical practices'. Some individuals, as municipality employees, started founding medical shops and retailing drugs with their own trade mark.[16] However, the political forces and the eminent personals did play a foremost role in profiling the community health services through several aspects such as assessments on resource distribution, technological preference, and the accessibility to the health care. The colonial health services, nonetheless, had instrumentalized the medical dependence of sufferers on the '*daktars*' and it also ensured certain market interests. A few scholars have argued that the reliance over the '*daktars*' and western medicine in turn accelerated the rejection of indigenous medical system.[17]

Ayurvedic medicine had experienced impediments after the foundation of Calcutta Medical College (CMC) in 1835, meant for the training of 'native doctors' in western medicine, and the instructions on 'traditional' medicine were mainly dispensed with.[18] Brahmananda Gupta has identified a number of '*ayurvedic*' professionals of nineteenth and twentieth century who pursued their medical careers in the midst of this antagonism, though, the 'traditional' medicinal systems continued to be marginalized in the British India.[19] In the early years of nineteenth century when the western biomedical ideas happened to be less imperious in its approach towards the disease prevalence in the 'native society' of India, the indigenous medicines were believed to be saviors of the latter. The materialization of colonial medicine had created a rupture

[16] Madhuri Sharma, *Indigenous and Western Medicine in Colonial India* (New Delhi: Cambridge University Press, 2012), 1-12.
[17] Debabar Banerji, "Place of the Indigenous and the Western Systems of Medicine in the Health Services of India," *International Journal of Health Services* 9, no. 3 (1979): 511-519.
[18] Farokh Erach Udwadia, *Tabiyat: Medicine and Healing in India and other Essays* (New Delhi: Oxford University Press, 2018), 116.
[19] Brahmananda Gupta, "Evolution of Ayurveda through the Ages," in *History of Medicine in India: the Medical Encounter,* eds. Chittabrata Palit and Achintya Kumar Dutta (New Delhi: Kalpaz Publications, 2005), 215-16.

in this unconcealed allegiance to the 'traditional' treatments.[20] Scholars are also reviewing the way in which '*ayurvedic*' studies got momentum only after the nationalist promotion of '*swadeshi*' medicine. Vasantha Madhava has shown that in colonial Karnataka, the indigenous medical system had undergone a massive political intervention of the Raj until the twentieth century when the 'native' medical practitioners sought a revival in the '*ayurvedic'* studies.[21]

These would be much simplified lines of reasoning that perceive the medical topography of colonial India only in terms of the advancement of western medicine and the retrogression of indigenous ways of treatment. The surmise does condone the convoluted dynamism of colonial health care which simulated not only the 'medical rationale' of the 'native *daktars*' but the conscience of diagnosed. The engagement of indigenous educated elites with the western biomedicine and the existing medical pluralism in the Raj was supposed to be the fundamental point of entry in reviewing the subtlety of the integration. Being the prime recipients of western education and medicine, the local elites, for example *Parsis* in Bombay and *bhadraloks* in Bengal Presidency, had been exploiting their experiences of western medicine to revive or recuperate the indigenous medical culture during the anti-colonial nationalist movements in India. The '*ayurveda*' and '*unani*' received espousals from known and anonymous practitioners, 'native' elites, nationalists, and later on provincial governments from 1937 onwards. Therefore, the incompatible relationship emerging out of 'struggle for power in a plural medical system' was reshaped by the indigenous elites of India.

Poonam Bala has drawn attention to the regional derivations in the ideas of the nationalist elites concerning the processes of medicalization in Bombay and Bengal. The 'intellectual proletariat',

[20] Subhadra Aich, "Incidences of Small Pox and British Policy in India," *the Quarterly Review of Historical Studies* 47, no. 1&2 (April, 2007-September, 2007): 222-256.
[21] K.G Vasantha Madhava, "Crisis and Revival of Ayurveda in Karnataka during the 19th and the middle of the 20th Centuries," *the Quarterly Review of Historical Studies* 47, no. 1&2 (April, 2007-September, 2007): 35-41.

i.e. western educated indigenous elites, became a potential group to challenge the monopoly of western medicine while probing into the colonial public health policies; in the twentieth century, the *bhadralok*-managed Bengali newspapers *Hitavadi* and *Sanjivani* were found criticizing the plague regulations of GOI. They reported that a quarter of the Calcutta's population left the city owing to the fear of government or '*sarkari*' regulations on plague, which were framed in Bombay. It appears that the Bengali *bhadraloks* consistently defied the practicability of colonial medicine and prophylactic measures by situating their 'selves' in this medical encounter, whereas, the *Parsis* in Bombay had succumbed to the ideals of western biomedicine. The power imbalance in the contested medical environment of Bengal was far greater than Bombay where the state-directed medical professionals and the consumerist outlook of the subjects had been less problematic to the government.[22]

This somehow entailed the correlation between the bio-political prerogatives of the government and the western biomedical thoughts of the '*Doctory Raj*'; the 'body' had become apple of discord within the colonial imperatives, both metaphorically and literally. In 'modern' biomedicine, the 'body', representing a space owned by an individual (healthy or diseased), acts as the 'metonym' which replaces the fundamental characteristics of the knowledge about the 'body' in '*ayurveda*'. This epistemological dimension of the encounter has contradicted the political or economic aspects that are previously dealt with in the studies of colonial medicine. What Berger has attempted to look into the various ways that made '*ayurveda*' a 'modern' form of medical episteme is revealing the 'standardization' and 'institutionalization' of the '*ayurvedic*' knowledge through the endorsement of certain texts as authoritative since late nineteenth

[22] Poonam Bala, ""Defying" Medical Autonomy: Indigenous Elites and Medicine in Colonial India," in *Biomedicine as a Contested Site: Some Revelations in Imperial Contexts,* ed. Poonam Bala (Lanham: Lexington Books, 2009), 29-42.

century. The colonial efforts at professionalization had been strongly followed for '*ayurveda*' as well. Thus, the constitutive elements of '*ayurveda*' were misappropriated in translating the knowledge of the 'body' into the categories of 'modern' biomedicine.[23] To the Bengali *bhadraloks*, the problem was more critical as far the 'lepers' were concerned. The medical periodicals and newspapers were engaged in the debate as to whether the bodies of the leprosy sufferers or the disease itself would be the elemental trouble to the '*samaj*'. Interestingly, this *coloniality* in treating the diseased bodies might differ from indigenous to western biomedicine but the essence or quality of addressing such medico-political issues in the Raj appeared to be embroiled with the flavor of colonialism.

'*Kustha rogi*' and '*Samaj*': the Portrayal, Representation, and Interpretation of the 'Lepers' in the Late Colonial Bengali Print Media

The year 1889, when Father Damien died of leprosy, is to be taken into account as watershed in the leprosy investigation of the British Empire. In the post-Damien period, the newspapers besides the journals and medical periodicals did take much interest in the existing figures of the 'lepers' in the empire, although, a few newspapers had found the approach of the colonial administrations, to constrain the movements of the 'lepers', objectionable. The Bengali weeklies or dailies were no exceptions. For instance, *Bangabasi* of 29th June, 1889 was against the compulsory confinement of the 'lepers' who were householders. It warned the government not to execute the compulsory segregation of 'lepers' under legislative enactment. The compulsory vaccination had already created 'serious evils'. Thus, it was undesirable to amplify the crisis

[23] Anirban Das, "Medical Knowledge of the Body: Colonial Encounters," *Rethinking Marxism: A journal of Economics, Culture & Society* 13, no. 2 (2001): 109-131.

furthermore by introducing the 'Leper Law' in India.[24] This observation was also echoed in the daily *Dainik O Samachar Chandrika* just a month later, on 23rd July. To them, the enforcement of the Law was believed to result in oppression and interference with the people's caste and religion, even if the purpose of the Law was seemed righteous. Though, a number of physicians such as Dr. Sanyal, M.D and Dr. Rajendra Chandra De were apprehensive about contagiousness of the disease, nevertheless, to *Samachar Chandrika,* the colonial officials, including the Governor General, the Lieutenant Governor, and His Royal Highness himself had commenced an unreasonable campaigning against the leprosy with the assistance of Anglo-Indian newspapers.[25] Referring to the religious beliefs and practices of the 'lepers', some editors had suggested to include provisions in the proposed Leper Bill in favor of these unfortunate people. *Surabhi O Pataka*, on 27th June, 1889, put forward the proposal of the High Priest of Baidyanath Temple, Deoghar that no 'lepers', who wished to go on pilgrimage for curing the diseases, should be detained in asylums.[26] In contrast to this view, both *Sanjivani* and *Sulabh Samachar O Kushdaha* had strongly approved the legal initiatives which were taken by the GOI about the 'lepers'. Lord Dufferin, who was afraid of interfering the native customs and religious prejudices, had been unwilling to take any proactive measure in dealing with the sufferers, but, *Sulabh Samachar* was of opinion that in order to stamp out this disease and isolate the leper beggars in the asylums with adequate food and medical aids, the GOI should make resilient laws, even if it caused inconvenience to the people:

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[24] See NAK, Indian-Language Papers, Government Papers, Bengal Newspaper Reports, *Bangabasi*, 29th June, 1889. Accessed [July 02, 2019]. http://www.ResearchSource.amdigital.co.uk/Documents/Details/INR_Part1_Reel11_Vol1.

[25] See NAK, Indian-Language Papers, Government Papers, Bengal Newspaper Reports, *Dainik O Samachar Chandrika*, 23rd July, 1889. Accessed [July 02, 2019]. *http://www.ResearchSource.amdigital.co.uk/Documents/Details/INR_Part1_Reel11_Vol1*.

[26] See NAK, Indian-Language Papers, Government Papers, Bengal Newspaper Reports, *Surabhi O Pataka*, 27th June, 1889. Accessed [July 02, 2019]. http://www.ResearchSource.amdigital.co.uk/Documents/Details/INR_Part1_Reel11_Vol1.

"The accomplishing of all this will give rise to many inconveniences, will deprive many of their means of living, will involve loss of personal liberty, and will wound the feelings of many, but considerations like these should on no account be allowed to stand in the way of the adoption, of effective measures for the protection of society against a disease so dreadful as leprosy."[27]

Sanjivani, on the other hand, was skeptic about the potency of the Leper Bill as it supposed to have detained only the mendicant 'lepers', whereas, the number of and threats from non-mendicant sufferers, who frequently went to bazaars, using bathing places, and socializing with healthy people, were larger than the mendicant 'lepers'. The government should, therefore, implement regulations in such a way that the 'lepers' would be excluded from entering public places.[28] The *Dacca Prakash*, on 28th July, 1889, had opined that leprosy was not as infectious as cholera, although, there would not be any problem in prohibiting the marriage of or cohabiting with a 'leper' if the 'Leper law' came to effect.[29]

It is easily deduced from the opinions of these editors that the Bengali *bhadraloks* were more perceptive to the 'leprous bodies' and their management, rather than seeking out remedies for the disease. To restrain the movement of the 'lepers' in Calcutta, they requested the government to found a new asylum apart from the one situated at Amherst street. The government, meanwhile, had already taken the initiative to shift the asylum from previous location to somewhere outside the Calcutta Municipality area. The problem was about fundraising for the maintenance of the

[27] See NAK, Indian-Language Papers, Government Papers, Bengal Newspaper Reports, *Sulabh Samachar O Kushdaha,* 28th June, 1889. Accessed [July 02, 2019]. http://www.ResearchSource.amdigital.co.uk/Documents/Details/INR_Part1_Reel11_Vol1.
[28] See NAK, Indian-Language Papers, Government Papers, Bengal Newspaper Reports, *Sanjivani,* 29th June, 1889. Accessed [July 02, 2019]. http://www.ResearchSource.amdigital.co.uk/Documents/Details/INR_Part1_Reel11_Vol1.
[29] See NAK, Indian-Language Papers, Government Papers, Bengal Newspaper Reports, *Dacca Prakash,* 28th July, 1889. Accessed [July 02, 2019]. http://www.ResearchSource.amdigital.co.uk/Documents/Details/INR_Part1_Reel11_Vol1.

proposed asylum. *Sulabh Samachar O Kushdaha* of 2nd August, 1889, had found a unique way to resolve this issue. The donation boxes should be placed at the prime areas of the city with a 'leper', sitting near each box. If someone wanted to donate, they would contribute in the charity box not in the hands of 'lepers'.[30] The sufferers, who in this context were supposed to be the only means to the *bhadraloks*, could be used as medium of 'charity'. In such sardonic environment where on the one hand the 'leper beggars' had been prevented from begging in the public places, on the other, the former was now allowed, rather instructed, to convene at the streets to obtain funds by themselves for their home. The city newspapers continued to demand for more rigorous application of the municipal laws over the leprosy affected people. *Somprakash*, on 23rd September, 1889, had appealed to Calcutta Municipality to strictly enforce the by-laws, barring the lepers to use the bathing platforms.[31] The establishment of a leper asylum in Calcutta was not warmly received by every section of the Bengali '*samaj*'. There were a few dissents, preferring to spend money in reviving the 'Hindu medicine' rather than erecting leper house. *Burdwan Sanjivani* of the 7th January, 1890, had possessed similar view. It said:

"the money which has been collected for the purpose of erecting a permanent memorial of Prince Albert's visit should be spent in establishing a school for the study of Hindu medical works and a hospital connection with such a school. It has been proposed to establish a leper asylum with the money. But as Government is legislating for lepers it will have to make provision for their housing and treatment when the Leper Bill is passed… can any memorial of the Prince's visit be

[30] See NAK, Indian-Language Papers, Government Papers, Bengal Newspaper Reports, *Sulabh Samachar O Kushdaha,* 2nd August, 1889. Accessed [July 02, 2019]. http://www.ResearchSource.amdigital.co.uk/Documents/Details/INR_Part1_Reel11_Vol1.

[31] See NAK, Indian-Language Papers, Government Papers, Bengal Newspaper Reports, *Somprakash,* 23rd September, 1889. Accessed [July 02, 2019]. http://www.ResearchSource.amdigital.co.uk/Documents/Details/INR_Part1_Reel11_Vol1.

more lasting in character than a school and a hospital for reviving the study and practice of Hindu medicine?"[32]

The term '*Hindu medical works*' does indicate towards the '*ayurvedic*' and other indigenous texts on medicine which would be more preferential to certain Bengali '*hindu' bhadraloks* for revitalizing the indigenous medical system in comparison with the building of lazaretto. In 1893, the Leprosy Commission in India 1890-91 had presented its report to the British government in India, although, the GOI was thinking of legislation while refusing to accept some of the Commission's proposals. *Dainik O Samachar Chandrika* of 5th September, 1894, was worried about the consequences of the proposed Leprosy Law if it was passed. An Inspector or Magistrate will be appointed in this regard having enough power to put all leper beggars into the leper asylums. *Samachar Chandrika* had pointed toward the oppressive rule of Charles Elliott, the Lieutenant Governor of Bengal, who was referred as '*zubberdust*' ruler 'oppressing the lepers of Calcutta and its suburbs'. His '*zulm*' or coercion, as he would not reckon with what the Commission recommended earlier, had been fervidly criticized by this newspaper.[33] The colonial politics on the administration of the 'lepers' bodies' was taking a newer stance since 1890s in India. As an idea, the *bhadralok* nationalism was set to influence the colonial efforts in managing the leprosy population and to impugn the ruling ideologies that empowered the authority to intercede into the individual realm. Far from being the apotheoses, colonization, and nationalization of health were in reality the ultimate manifestations of governance over the

[32] See NAK, Indian-Language Papers, Government Papers, Bengal Newspaper Reports, 1890, *Burdwan Sanjivani*, 7thJanuary,1890.Accessed[July07,2019]. http://www.ResearchSource.amdigital.co.uk/Documents/Details/INR_Part1_Reel12_Vol1.

[33] See NAK, Indian-Language Papers, Government Papers, Bengal Newspaper Reports, 1894, *Dainik O Samachar Chandrika*, 5th September, 1894. Accessed [July 07, 2019]. http://www.ResearchSource.amdigital.co.uk/Documents/Details/INR_Part1_Reel16_Vol1.

conditions which made the concept of '*swasthya*' tangible. The '*kustha rogi*', to the '*rashtra*' and '*samaj*', was seen a sort of antithesis that opposed, refuted, and resisted the rationale or that tangibility of '*swasthya*'. In short, the *bhadralok* logic, which was believed to be one of the inalienable parts for the foundation of 'national health', happened to be either supporting the colonial state, to put the 'leprous bodies' into asylums or treating them 'medically'.

The *Bankura Darpan* of 8th February, 1904, was trying to find out the causes of leprosy, although, the etiology of leprosy that Dr. Hutchinson had provided was to some extent inappropriate in India. Dr. Hutchinson's theory popularized the fact that eating putrid or dried fish was the principal reason of contracting leprosy. *Darpan* frowned on this view with available statistics where it was evidently explained that in Bankura, Birbhum, Burdwan, and Santhal Parganas, which were mostly leprosy affected areas, people consumed the amount of putrid fish less than the people of Jessore, Khulna, Backergunge, and 24 Parganas.[34] However, Hutchinson's view over causations of leprosy had been under severe criticism since 1890s. It seems that the 'leper' problem in Bankura district was still precarious to the state and Bengali '*samaj*' as well, even after the foundation of Bankura Leper Asylum in 1902. During 1920s, the local municipal boards in association with the provincial governments intended to set up various '*swasthya raksha samiti*'s to inquire the specific public health issues. With the assistance of Satyendra Roy, the Collector of Bankura, a '*Kustha Rog Nibarani Samiti*' (the Leprosy Eradicating Association) was formed in 1921. The Chairmen of the District Board and Municipality, the Civil Surgeon, and a number of physicians of Bankura Leper Asylum were the members of this *Samiti*. Initiatives from *bhadralok 'samaj'*, to eradicate such disease (or

[34] See NAK, Indian-Language Papers, Government Papers, Bengal Newspaper Reports, *Bankura Darpan*, 8th February, 1904. Accessed [July 07, 2019]. http://www.ResearchSource.amdigital.co.uk/Documents/Details/INR_Part2_Reel1_Vol1.

diseased?) had been really commendable to the Raj, but that too was not really 'satisfactory'. The author of *Bankura Jilar Biboran* thought that the nonchalant approach of Bengali people towards leprosy problem in the district had worsened the condition. He was worried about the way in which the '*zamindars'* and the people belonging to upper echelon of the society got infected, yet the government, district boards, and municipality could do nothing to prevent the contagion.[35]

This was supposed to be a *bhadralok*'s plea to '*samaj*' for eliminating the disease as his community also was not secured anymore. From the late nineteenth century, everyone related to leprosy treatments had been making an effort to prepare its curative medicine. Some of them claimed to have infallible remedies of this disease. Such news appeared in the *Utkaldipika* of 19th March, 1904 informing the miraculous medicine of Kaviraj Balkrishna Das which had proved 'an infallible cure for leprosy, and requests the public to judge the efficacy of the medicine by examination and experiments.'[36] Not only in Bengal, there were several claims, having comparable narratives, on the personal medical cure to leprosy from different parts of the Raj. In 1937, Vishnu Sarveswarudu of Devarapalle, Andhra Pradesh, had discovered a 'medicine' that would cure many leprosy sufferers. The medicine, which eventually got doctor's appreciation, was prepared by using 'native non-poisonous herbs' without taking mercury or sulpher. It could heal the affected person from forty days to six months. While informing his exceptional curative drug, Mr. Sarveswarudu wrote to Gandhi in 1941 and requested him to apply this amongst the patients of Savarmati Asrama.[37] Unfortunately, we are unable to know whether Gandhi sent his

[35] Ramanuj Kar, *Bankura Jilar Biboran* (Bankura, 1925), 55-58.
[36] See NAK, Indian-Language Papers, Government Papers, Bengal Newspaper Reports, *Utkaldipika,* 19th March, 1904. Accessed [July 07, 2019]. http://www.ResearchSource.amdigital.co.uk/Documents/Details/INR_Part2_Reel1_Vol1.
[37] Nehru Memorial, Museum, and Library (NMML), Private Paper Archives and Manuscript Section, Pyarelal Papers, Subject File, S. No.335, Individual Letters to Gandhiji relating to nature cure treatment.

consent to Sarveswarudu or not; though, these hearsays, which are frequently found in the private correspondences or local pamphlets during the late colonial phase, had been the exemplars of non-IMS intrusion into the colonial medicine.

The local newspapers were much preoccupied in explicating the conditions of leprosy in their respective districts. On 21st September, 1908, the *Purulia Darpan* presented several causes for the unusual prevalence of the disease in Bankura, Manbhum and Birbhum districts. The arid climate along with uneven terrain and woody highland were favorable for the growth of leprosy (though it was uncertain that how the asymmetrical landscape was connected to the escalation of disease). Moreover, the lower classes inhabiting in these districts, i.e. *bauri*, *kurmi*, and *bhumij*, had disregarded the rules and restrictions of 'modern' hygiene, dietetics. Most *bauri* women lived by prostitution; therefore, they helped to disseminate the disease. According to the popular belief prevailing in these districts, leprosy was not contagious, which made people socialize freely with the 'lepers' and 'thus constantly expose themselves to the danger of contamination.'[38] The contemporary 'scientific' explanations regarding leprosy transmission undoubtedly influenced the editor of *Purulia Darpan*, but, it was difficult to belief that after the pronouncement of the Lepers Act in 1898, people hitherto continued to mingle with the 'lepers' devoid of any restraint.

Apart from newspapers, the non-medical periodicals had also grappled with the issues that cropped up in the medical academia from the late Victorian period. Out of these, the 'nursing' was turned out to be an essential component in the manual of modern medical treatment during

[38] *See* NAK, Indian-Language Papers, Government Papers 1908/07-1908/12, Bengal Newspaper Reports Jul-Dec 1908, *Purulia Darpan*, 21st September, 1908. Accessed [July 07, 2019]. http://www.ResearchSource.amdigital.co.uk/Documents/Details/INR_Part2_Reel10_Vol1.

the post-Crimean War. It was not inconsequential that the idea of '*seva*' or '*susrusha*' became the major criterion in making of ideal womanhood in the Raj. The domestic manuals on health, hygiene, and married life had been prepared for educating the *bhadramahilas* about their sacrosanct duties to the home, '*samaj*' and '*desh*'. Thus, helping the 'desolates' would be the ideal or '*adarsh*' to the Bengali women who were ready to sacrifice their desires in the name of nation. The epitome of 'Nightingalian tending' was steadily brought into the private spheres of Bengali '*samaj*' in a way that both indigenous elites and the Raj could shape the morphology of inner domain. In the monthly periodical *Mahila*, the necessity of 'nursing' had been discussed with proper example such as Father Damien who founded a 'Nursing Society' and later on died of leprosy while serving the 'lepers' in Molokai. To the author of that article, the incidence of contagious diseases was far more significant in Calcutta than ever before. The exigencies required immediate 'care' to the diseased such as the 'lepers', the small pox and diphtheria patients. In paying considerable attention to the patients, one must rely on two cardinal features of 'nursing', i.e. 'believe in God' and 'caring mind'; besides, the author had intended to explicate the countenances by taking references from '*Mahabharata*' where *Subhadra*, one of the leading characters, had explained to *Sulochona* about the importance of 'nursing' and the role of a woman in this righteous pursuit. Nevertheless, *Subhadra* had been portrayed as ideal figure in the article who thought that it was the woman's duty (*nari dharma o brata*) to be compassionate, empathetic and gentle to the 'disabled'. Thence, despite conceding the relevance of the fundamental debate on whether women are much efficient in this profession than men, the author seemed to have supported the former.[39]

[39]*Bangla Shan* or Bengali Year (BS) 1322, *Mahila* 21, no. 5 (Calcutta, 1915):113-115; this monthly Bengali periodical was published for women to provide them moral and spiritual education.

After the formation of the provincial governments in 1937, the regional power structures were more engaged in resolving some of the major public health problems that had been prevalent in the specific areas. The local municipalities, with the help of the 'Leprosy Eradication Committees', had often observed the Leprosy Days. One such committee, which was founded in April, 1933, had declared 20th September, 1937, as Leprosy Day in the Asansol Municipality and mining areas. Moreover, a sum of Rs. 10,000 was collected out of selling flags amongst the people. This news appeared in *Jugantar* on 22nd September, 1937.[40] Simultaneously, a medical centre for leprosy treatment was established at Shilda of Jhargram Sub-Division in August, 1932 and all its financial liabilities were taken by the District Board. Under its guidance, there were three centers working at Magura, Belpahari, and Argoda village altogether. To extend the awareness amongst the people, this medical center even performed a drama named '*Andhare Alo*' (the light in the darkness).[41] Another weekly named '*Mukti*', which dealt with the various issues of eastern Manbhum or Purulia region specifically, was as significant as the others. This periodical, as an organ of *Silpashram* which happened to be a Gandhian ashram, was published by Nibaran Chandra Dasgupta in 1925 from Purulia Town. In 1942, most of the members had supported the Congress Socialists and set up an institution called *Lok Sevak Sangha*. However, this weekly was often proscribed by the state during 1940s for its supposed connection to the anti-governmental activities. The Manbhum District Congress Committee was eventually associated with its functioning, although, the '*Mukti*' had continued to criticize the governmental policies in post-independent India. It campaigned against splitting up the Manbhum district on

[40] See *Jugantar*, (Calcutta, 22nd September, 1937): 14.
[41] BS 1345, *Palli Shree* 1, no.1 (Calcutta, 1938): 10; this was also a monthly Bengali periodical appeared in 1938. The editors were Sri Amulya Krishna Dutta and Sri Nripendra Narayan Som. It mainly took the developmental works in the rural Bengal into account.

the basis of linguistic identity and attaching Purulia as a district of West Bengal. Still this periodical has been circulated and distributed from *Mukti* Press of Purulia as a regional paper.

The news, concerning a group of '*kustha rogi*' who did not get accommodations in 'New Leper Home' at Purulia, appeared in *Mukti* on 12th January, 1948. This home had been previously visited by the Honorable Governor Jayram Das Doulatram. After this incident, Mr. Doulatram felt that the institution required more accommodation for the 'lepers' who sought to have shelter:

"I am happy as well as sad after visiting this institution for a brief period of time. I am tremendously delighted to see the endeavor of the stakeholders, but simultaneously depressed about the lack of support from everything. I hope that the next visit will only provide me contentment."[42]

Here, the return of these 'lepers' was considered frightening to the society. The inability of the local authorities to provide them adequate housing seemed to have caused trepidation amongst the healthy enclaves. Such disquietude became visible in the periodicals during the early years of independence. In 1950, Mr. Jayanta Kumar Dan had expressed his distress about the growing numbers of '*kustha rogi*' in the Purulia city. They were strolling around the streets and some of them started dwelling at the pavements permanently. To him, the local municipality did nothing to remove them from the avenues; even the people could not realize the magnitude of the problem. Mr. Dan was also worried about the way in which these '*kustha rogi*' were roaming about the city on Sundays and sleeping at the verandahs of Municipality office and Town Hall.[43] He had accused the authorities by alleging them as uncommunicative bystanders:

[42] BS 1355, *Mukti*, 9th year, no. 6 (Purulia, 12th January, 1948): 14.
[43] BS 1357, *Mukti*, 11th Year, no. 26 (Purulia, 29th May, 1950): 9-10.

"Is the Municipality sleeping? The health of the both city and the public are at their hands- what are they doing to prevent the contagion? Will the management of the Leper Asylum still be quiet in this regard? Do not they have any responsibility to the people? I, therefore, have drawn the attention regarding this matter to the Municipality authority and the management of the Purulia Leper Asylum."[44]

The cultural discourse, that shaped the *bhadralok* perceptions about the 'diseased' or '*rogi*' in the colonial settings, remained unaffected or unaltered in the postcolonial imaginings, related to the 'contagious patients'. Moreover within the fissured and perplexed nationalism which culminated into identity politics in 1950s and galvanized the regionalization of culture, the '*kustha rogi*' in India have had found little hope to do away with the stigma they were carrying.

'*Ki korite hoibek*?'(What is to be done?): Revisiting the Assorted '*Kustha Cikitshas*' in the Contemporary Bengali Medical and Health Periodicals

Like *Lancet*, which came out in 1823, a number of health and medical Bengali journals had been published since the late nineteenth century concurrently with the other vernacular health journals in the Raj. The purpose of these journals, however, was to disseminate the 'scientific facts', concerning the causations or transmissions of the diseases. The varied treatment procedures, the efficacies of curative (*obyartha mahousadh*) and preventive medicines in the diagnosis and the newer findings on disease prevalence or incidence had fascinated the subscribers of the periodicals, such as Bengali *bhadraloks*, *daktars*, physicians, and medical apprentices. Along with these, the printed commercials of the numerous pharmaceutical companies in the journals had encouraged, rather intrigued, the readers to buy the products that claimed to be superior in

[44] BS 1357, *Mukti*, 11th Year, no. 26 (Purulia, 29th May, 1950), 10.

quality in contrast to the others. From 1905 onwards, the Swadeshi movement, as expected, had accelerated the growth and performances of large number of small and medium scale indigenous pharmaceutical companies in the British Indian market, although, a few scholars have argued that the fame of '*swadeshi*' medicine had traversed beyond the supposed national boundaries and even reached as far as to the distant lands of the United States.[45] It shows that this broader domain of medical mercantilism which was/is overtly international in nature had fervent 'nationalist' fad as well. Publicizing the '*swadeshi*' medicine, thus, was a major means to the indigenous manufacturers through which they could contest with the western pharmaceutical companies. The '*swadeshi*' whiff, which was sprayed on those products as a sentinel of nationalism, might have tantalized the people's emotion about the brand.

To avert the surge of foreign drugs in the Indian medical markets, the indigenous pharmaceuticals went for twofold conduits. Firstly, they had intended to promote the eminence of '*ayurvedic*' medicines amongst the consumers. Secondly, taking all the Western chemical improvements into consideration and realizing the 'objective condition' of the colonial rule, they proposed to modify the entire process of commoditization both in case of '*swadeshi*' allopathic and '*ayurvedic*' medicines.[46] Likewise, the partisan distributors namely Buttokrsito Paul or Prafulla Chandra Roy and physicians such as Radhagobinda Kar and Nilratan Sircar helped to 'popularize the indigenous drugs and acids' with their vigor. This conscious effort to be engaged in producing '*swadeshi*' materials was devoid in the successive ventures of compradors during the early days of the Company Raj.[47] In the late nineteenth century, however, the Bengali

[45] Projit Bihari Mukharji, *Doctoring Traditions: Ayurevda, Small Technologies, and Braided Sciences* (Chicago: University of Chicago Press, 2016), 1-4.
[46] Amit Bhattacharyya, *Swadeshi Enterprise in Bengal: the beginning 1900-1920* (Calcutta: Mita Bhattacharyya, 1986), 58.
[47] Sumit Sarkar, *The Swadeshi Movement in Bengal 1903-1908* (New Delhi: People's Publishing House, 1973), 108-124.

periodicals were used as the mediums that could influence the consumers to opt for '*swadeshi*' medical drugs while undermining, and boycotting, the foreign products.

In 1870s, the Bengali *bhadraloks* started publishing few '*ayurvedic*' manuals or handbooks about therapeutics largely for the domestic purpose. For instance, the text on Indian Pharmacology or '*Bharata Bhaishayjo Tattva*' was written by Ambika Charan Rakshit in 1879. The author sought to compile the varied treatment procedures taking references from Sanskrit and English medical texts. Thus, this book was prepared with an intention to persuade the '*swadeshi*' physicians, especially the certified '*daktars*' of medical colleges and schools in Bengal, for using Indian medicinal herbs. It had enlisted lots of indigenous basils and their utilities in various diseases. For the treatment of leprosy, the author had advised the readers to use oils extracted from sunflower, sour fruits, wormwood etc.[48] Prior to the age of antibiotics and sulfone, in 1940s, chaulmoogra oil was the only medicinal drug used in the leprosy treatment. One of the Bengali health journals '*Swasthya*'[49] in 1898 had informed the readers about the worth of using 'chaulmoogra oil' in the diagnosis. The periodical was of opinion that albeit there had been no such reference of this oil in ancient '*ayurvedic*' texts, [which seems untrue] it could be found commonly in rural medicinal treatments of leprosy. This was also referred in '*hakimi*' texts in which the detailed analyses of external and internal administration of 'chaulmoogra' in leprosy and other skin diseases were documented. After seeing the efficacy of the oil, the British physicians were recently willing to employ this drug on their patients; furthermore, quite a few hospitals in London had applied this oil to the 'gout' cases. The *Swasthya* was supposed to be

[48] Ambika Charan Rakshit, *Bharata Bhaishayjo Tattwa: A Handbook of Materia Medica and Therapeutics on Indian Drugs* (Calcutta: published by Nreesingho Prosad Rakhit, 1879), 431-32.

[49] Bangiya Sahitya Parishad (BSP), *Swasthya*, one of the popular Bengali monthly periodicals on medicine and public health, started its journey in 1897 during the outbreak of the plague in Bombay and Calcutta. It recorded the details of the plague epidemic in Calcutta in 1899 and was edited by Durgadas Gupta. *Swasthya* was printed by Kunjabihari Das, Victoria Press, 2 Goabagan Street, Calcutta.

disappointed on the '*grihasta*' or Bengalis who were hitherto unaware of the effectiveness of these indigenous plants:

"having seen the impeccable medicinal values of these indigenous products does not the '*grihasta*' want these materials to be researched by the British physicians?"[50]

Yet, the Bengali *bhadraloks* thought of foreign guidance in obtaining the 'real' value of the indigenous medicine until the indianization of IMS and research institutions from 1905 onwards.[51] In 1904, the discussion on the importance of hydnocarpus oil in diabetes and leprosy treatment came to be appeared in one of the issues of '*Bhisak Darpan*'[52]. It cited the work of Dr. Watt's 'dictionary' and the Pharmacographia Indica, talking about the *Hydnocarpus wightiana* that was found in the Western Ghats mainly and its oil had been utilized in Malabar for treating leprosy and the horse diseases;[53] but the journal made a distinction between 'chaulmoogra' and 'hydnocarpus' which was again not feasible as both the terms represent the same plant. The '*Bhisak Darpan*' had also requested the readers to present their views on this matter;[54] this periodical itself continued to explore more about the disease in their following issues. The opinion of Dr. Major W. J Buchanan, the Inspector General of Prisons, Bengal, on the contagious diseases was translated into Bengali and published in this periodical where he considered '*kustha*' as an ancient chronic disease of India which could be transmitted through humans.

[50] BSP, BS 1305, *Swasthya* 2 (Calcutta, 1898):111.
[51] Shirish N. Kavadi, "'Clear Stream of Reason… Lost its Way into the Dreary Desert Sand of Dead Habit': the Story of the All India Institute of Hygiene and Public Health, Calcutta, 1922-45," in *Science and Modern India: An Institutional History, c.1784-1947: Project of History of Science, Philosophy and Culture in Indian Civilization, vol. 15, part 4*, ed. Uma Dasgupta (New Delhi: Pearson Longman, 2011), 632; Anil Kumar, *Medicine and the Raj: British Medical Policy in India, 1835-1911* (New Delhi: Sage Publications, 1998), 5-12.
[52] BSP, *Bhisak Darpan* was another popular Bengali monthly journal on health, medicine and surgery dealing with the case histories of the patients. The journal received government aid and published the reports of the Government Health Department and Medical College. This periodical was initially edited by Jahiruddin Ahmed and Dr. Kalimohan Sen, but later Dr. Girishchandra Bagchi joined with Kalimohan.
[53] William Dymock, *Pharmacographia Indica: A History of the Principal Drugs of Vegetable Origin met with in British India, Vol. 1* (Calcutta: Thacker, Spink & Co., 1890), 148-50.
[54] BSP, BS 1311, *Bhisak Darpan* 14, no. 1 (Calcutta, 1904): 14.

However, there had been hardly any 'leper' in the jails. If someone got infected, either he was sent to the Central Jail of Midnapore, having a separate ward for the leprosy sufferers or as an alternative, to the Mujaffarpur Jail. To Buchanan, the only way to eradicate this disease from this society was to implement the policy of segregation amongst the sufferers and to prohibit the 'leper' marriages rigorously which eventually was already put into practice in the missionary asylums [especially those under the Mission to Lepers] from the beginning. He also agreed with the provisions of the Lepers Act of 1898, forbidding the sufferers to sell the food stuffs in the public places.[55]

There were other health monthly periodicals dealing with the treatment of various contagious diseases including leprosy. For example, the '*Cikitsha Prakash*'[56] in 1910 had published an interesting article of Sriramdeb Mukhopadhaya on Chromopathy or Chromotherapy or 'Color therapy'.[57] To him, a number of colored bottles, stained glasses, and a lantern were needed in this diagnosis. After putting water into those bottles, one should keep them in sunbeams for two hours. The bottled 'water', therefore, was named according to the color of the container. Thus, the water of 'yellow container' had been effective in leprosy treatment.[58] The entire process seemed to be bizarre to the readers, though, it was one of the popular ways of treatment during the late nineteenth and early twentieth century United States. Another reference of '*kustha*' treatment was found in the fifth issue of this journal where Hem chandra Sen had talked about

[55] BSP, BS 1312, *Bhisak Darpan* 15, no. 7 (Calcutta, 1905): 257-58.
[56] BSP, *Cikitsha Prakash* was another Bengali health monthly journal published in 1907. The editor was Dhirendranath Halder.
[57] Chromotherapy had emerged, mostly in the United States of America, as an alternative treatment considering light as a form of color in order to balance "energy" deficiency in a body. The American Civil War General Augustus Pleasonton had published a book named '*the Influence of the Blue Ray of the Sunlight and of the Blue color of the Sky*', stating how the color 'blue' can develop the growth of the crops and livestock and heal the human diseases. There was another Indian born American citizen 'scientist' Dinshah P. Ghadiali who published the *Spectro Chrome Metry Encyclopaedia* in 1933, explaining the various therapeutic effects on organisms by using different colored rays. Although, these color healers were often accused as 'quacks'.
[58] BSP, BS 1317, *Cikitsha Prakash* 3, no. 4 (Calcutta, 1910): 97-99.

the importance of '*Tuvrak*' in leprosy diagnosis. To Sen, both this '*Tuvrak*' and *Hydnocarpus wightiana* were two different names of the same tree. In *Susruta Samhita* and Baghvatta's '*Astangahridaya*', a detailed narrative of medicinal preparation from '*Tuvrak*' seed was discussed. This oil extracted from its seed could cure all kinds of leprosy and other skin diseases.[59] The following issues of the periodical were concerned about the vectors of the disease [though leprosy is not vector-borne disease, but, a few scholars in the early years of tropical diseases research had opined that the bacteria were carried by the insects]. While addressing the issue as '*Roger bahon*' (the Vector of the disease), *Cikitsha Prakash* in 1911 was of opinion that the house flies were the real vectors of the disease rather than mosquitoes which earlier had been considered by the western scholars as the only vector in transmitting the germs like malaria. The journal says:

"if the house flies, those had rested on ulcerous patches of leprosy sufferers, were inspected carefully one would find the bacterial remnants on their horns, foot and bodies. Therefore, you should not allow the houseflies to sit in on your bodies if you want to keep yourself away from leprosy."[60]

The '*Ayurveda Hitoishini Patrika*'[61] had published the news related to the treatment of leprosy in 1911. In the article named '*Kustha Roger Cikitsha*', the periodical informed the readers about the findings of Dr. Major Rost, I.M.S from Rangoon and Dr. Captain Williams, I.M.S from Bombay (now Mumbai). Both of them claimed to have discovered the theories concerning the transmission of leprosy. Dr. Rost had been working on leprosy for seven years and he treated ten

[59] BSP, BS 1317, *Cikitsha Prakash* 3, no. 5 (Calcutta, 1910): 125-26.
[60] BSP, BS 1318, *Cikitsha Prakash* 4, no. 6 (Calcutta, 1911): 162.
[61] BSP, *Ayurveda Hitoishini Patrika*, monthly journal on *ayurveda*, was first published from *Ayurveda Hitoishini Sabha* of Dacca in 1911. The editors were Sri Anukul Chandra Shastri and Sri Hemchandra KavyaTirtha.

leprosy patients out of which two were completely cured.[62] Along with this journal, there were numerous Bengali '*ayurvedic*' periodicals, trying to find out the causes and remedies of '*kustha*' in the early twentieth century. Some of them still considered leprosy and other contagious diseases as the wraths of God. For instance, '*Ayurveda Bikas*'[63] in 1913, which was taking references of small pox from '*ayurveda*', had referred to the ideas of Madhava Kar[64] and Shangadhar[65] who thought that leprosy and small pox both were sharing a common origin. The 'Providential curses' such as, swelling, poisonous skin diseases, small pox, and leprosy, had been placed in the similar category in the '*ayurevdic*' texts.[66]

Sri Prabhas Chandra Bandopadhayay had written an article in 1914, titled '*Kustha Byadhi O Tahar Protibidhan*' (Leprosy and its Cure) in the popular Bengali health periodical '*Swasthya Samacar*'.[67] It appeared in a crucial time when the Governor of Bengal Lord Carmichael, with the assistance of Sir Leonard Rogers had laid the foundation of the Calcutta School of Tropical Medicine (CSTM) and simultaneously the First World War ushered in. Prabash Bandopadhayay aimed to provide a historical background of leprosy treatment and the prevalence and incidence rate of leprosy in the world including his own surmises. He did not want to engage himself with the fact that whether leprosy was the 'Providential curse' or not, rather, he was keen to identify the reasons behind the anguish and distress of the sufferers. To him, the unfortunate leprosy patients had undergone not only the pain which they had experienced since the manifestation of the disease but also the denial of the society. It was contagious undoubtedly and prevalent in

[62] BSP, BS 1318, *Ayurveda Hitoishini Patrika*, 1st year, no. 1 (Dacca, 1911): 32.

[63] BSP, *Ayurveda Bikas*, another monthly *ayurveda* journal, had been published from Dacca by Sri Kaminikumar Sen and edited by Shudhansu Bhushan Sengupta Kavyatirtha.

[64] Madhava Kar (or Madhava Kara) was Ayurveda practitioner during seventh or early eighth century. He wrote Rog-vinischaya which is called 'Madhava Nidana' as well.

[65] Sanghadhara is known for his text on ayurveda.

[66] BSP, BS 1320, *Ayurveda Bikas*, 1st year, no. 12 (Dacca, 1913): 372.

[67] BSP, *Swasthya Samacar* was a monthly Bengali health journal edited by Kartik Chandra Basu in 1912.

those countries where leprosy turned out to be lethal. He was also in favor of segregation which had been the only means to prevent the progress of the disease. Apparently, for Bandopadhayay, the segregation or isolation of the affected people, who were being separated from their families or relatives, seemed to be insensitive or unsympathetic, but, that seclusion was only for the benefit of those patients. By following this policy of segregation, England had almost got rid of leprosy, although, this form of isolation was not firmly carried out in India for which the number of leprosy sufferers was increasing. In Calcutta, the sufferers were usually found sitting at the restaurants [most of them operated by '*muslims*'], begging at the streets, and even selling products. Thus, the government with the support of the people should be more vigilant over those '*kustho rogi*', so that, they would not be able to spread the germs further. Otherwise, the leprosy in India would become as deadliest as malaria, plague, and cholera.[68] Though he was not familiar with the '*ayurvedic*' medicine, Bandopadhyay had commented on '*ayurvedic*' scripture regarding the contagiousness of leprosy. As it says:

"Having physical contact, sharing the meal or bed, sitting together and using the materials that previously belonged to the sufferers- are the most obvious causes of getting infected by leprosy, flu, tuberculosis and conjunctivitis which could be transmitted through human beings."[69]

He conformed to this statement with a hope that the newly founded CSTM would succeed in delving into the worth of indigenous plants and drugs. In 1915, Sri Hrishikesh Gupta Vidyaratna's '*Bharatiya Vesaja Tattva*' (Indian Ayurveda) was published in '*Cikitsha Prakash*'. He talked about the importance of chaulmoogra oil which had been surprisingly identical to that of the article which appeared in 1898 '*Swasthya*'. However, he added few observations about the

[68] BSP, BS 1321, *Swasthya Samacar,* 3rd Year, no. 5 (Calcutta, 1914): 136-39.
[69] ibid, 139.

oil massage which proved to be effective in any disease including leprosy.[70] Often the symptoms of 'white leprosy' or 'leucoderma' were mistakenly perplexed as another form of leprosy. This erroneous belief, which disappeared from the medical academia of the early twentieth century, still remained in the popular understanding about '*kustha*'. Sri Pranbandhu Majumdar from Sirajganj, Pabna had asked the editor of *Swasthya Samacar* in 1916 whether 'white leprosy' or '*Swet kustha*' was to be perceived as one of the forms of leprosy. The periodical negated this conception and replied that this '*Swet kustha*' or '*Dhabal rog*' or leucoderma was not leprosy at all.[71]

The 1916 was considered a defining moment in Indian history. The moderate and extremist factions, existing within the Indian National Congress (INC) since the Surat session of 1907, had been bridged in the Lucknow session. It eventually facilitated to bring forth the political unanimity between the Congress and Muslim League. The Congress-League scheme, crafted by a joint committee of seventy one Congressmen and League leaders, had marked the pinnacle of Hindu-Muslim cooperation for attaining self-rule.[72] Meanwhile, the members of the Home Rule League, such as Annie Besant and Lokmanya Tilak, had also played a foremost rule in introducing the Congress-League Pact or Lucknow Pact.[73] The session was presided over by Ambika Charan Majumdar who was from Faridpur, Bengal. *Swasthya Samacar*, in its 1916 issue, had discussed about the meeting in brief, but was frustrated too as the prime concerns related to the rural development, the public health, and the access of drinking water were largely

[70] BSP, BS 1322, *Cikitsha Prakash*, 8th Year, no. 2 (Calcutta, 1915): 59.
[71] BSP, BS 1323, *Swasthya Samacar*, 5th Year, no. 6 (Calcutta, 1916):189-90.
[72] Nitish Sengupta, *Land of Two Rivers: A History of Bengal from Mahabharata to Mujib* (New Delhi: Penguin Books, 2011), 333.
[73] Bipan Chandra, *India's Struggle for Independence, 1857-1947* (New Delhi: Penguin Books, 1989), 142-49; Sumit Sarkar, *Modern India, 1885-1947* (New Delhi: Macmillan Publishers Ltd., 1983), 150-51.

overlooked in the session.[74] This approach seemed to be changed since Gandhi entered into the Congress politics; the questions of rural reconstruction, development of indigenous medicine, especially natural cure, and public health had become prioritized in the post-1920 sessions of the INC.[75]

In 1919, one of the leading Bengali monthly periodicals '*Ayurveda*'[76] brought out an article named '*Kaviraji Ausadhe Kustha Rog Arogya*' (the Leprosy cures in *Kaviraji* Medicine). This was an excerpt collected from Late Dr. Hemchandra Sen's diary who claimed to have three leprosy patients amongst which two were '*muslims*', and one was '*hindu*' Marwari, infected while serving the leprosy sufferers. Apart from the differences in nomenclatures, the causations of leprosy might change between discourse on western and indigenous medicine. In the western medical science only the germ '*bacillus lepra*' caused leprosy, although, '*ayurveda*', in contrast to the causalities that were put forward by the western medicine, had offered various 'unfounded' reasons behind this infectious disease. Of which, the dietetic difference would be the most probable source of contagion. Sen was much more convinced about the racial susceptibility to the disease and its connection with the 'diets'. To him, the prevalence of leprosy had a straightforward relation to the consumption of 'fish and meat'. Reliance on vegetarian diet helped the '*hindu*' Marwari to recover from leprosy in comparison to the '*muslim*' patients who could not inhibit themselves from taking '*onion*' and '*meat*' when they were undergoing the treatments.[77] Sen had presented a theory which was nonetheless culture specific associated with the idea of *raciality*. There should have been other reasons as well for the deterioration of '*muslim'* leprosy patients, but, this dietetic variance made the '*hindu*' Bengali physicians to

[74] BSP, BS 1323, *Swasthya Samacar*, 5th year, no. 10 (Calcutta, 1916): 289.
[75] See the *Proceedings of the 35th ordinary session of the Indian National Congress held in Nagpur*, 1920.
[76] BSP, *Ayurveda*, a monthly *ayurveda* journal edited by Sri Satyacharan Sengupta Kaviranjan, was first appeared in 1916.
[77] BSP, BS 1326, *Ayurveda*, 4th Year, no. 6 (Calcutta: 1919): 267.

believe in 'vegetarianism' that must be followed by the '*hindu'* Bengali *bhadraloks* to prevent the contagion. Some 'eccentric' observations were found in the *Caraka Samhita* that later transliterated and published in the Bengali health journals. Dr. Nalininath Majumdar wrote an article on '*Arishtha Lokkhon Tattva'* (Theory of Adverse Symptoms) in *Cikitsha Prakash* wherein he discussed the 'interpretation of dreams'; if someone dreams of kneading 'ghee' on his entire body by himself and performing '*yajna*' or seeing the lotus blooming on his chest. These would be the signs of death from leprosy.[78] Besides this, the journals had also provided the list of indigenous herbs with their respective usages in the treatment of chronic and infectious diseases. For example, in '*ayurveda*', Babla or Babul tree was (*Acacia arabica*) believed to be the disinfectant of cough, worm, and leprosy.[79] On the other hand, Kaviraj Hariprasanna Ray kaviratna was of opinion that the roots of giant calotropis or crown flower (*Calotropis gigantean*) with leaves, hanging roots and barks of devil tree (chatim) have to be trampled and prepared as medicine for the ulcerous patients.[80]

Likewise, *Shusruta* was often cited in the vernacular journals as well. Kaviraj Rakhaldas Sengupta Kavyatirtha Vidyabinod referred to *Shusruta* in his article '*Sankramok Rog O Jibanu Tattva*' (Contagious Diseases and the Germ theory). He had pointed out that, along with the fever, tuberculosis, and other symptomatic diseases, leprosy too could be transmitted from one human body to another. As most of these diseases, what *Shusruta* might thought, were the consequences of 'sins', 'unrighteous act', 'fasting', 'immorality', 'overeating', 'impurity', people should avoid such ways of '*adharma*' or 'unrighteousness'. Kaviraj Sengupta had

[78] This was translated into Bengali from *Charaka Samhita,* by Nalininath Majumdar
"nagnasyajyabasiktasyya juhwatohognimanarccisham
Padmanyuroshi jayante swapne kusthe morishyataa" (5 A, *Indriya Sthan*), BSP, BS 1326, *Cikitsha Prakash,* 12th year, no. 2 (Calcutta, 1919): 69.
[79] ibid, 81.
[80] BSP, BS 1327, *Ayurveda,* 4th year, no. 9 (Calcutta: 1920): 390.

commented on the *Shusruta*'s text while differentiating the ideas of western materialistic scholars, who considered the germ as the exclusive means of diseases, from the maxims of Aryan sages, believing in '*adharma*'. Thus, it will be unfair to ascribe '*ayurvedic*' treatment as 'unscientific' and 'intuitive' in contrast to the western medical philosophy. Simultaneously, the aura of '*harinam sonkirtan*' (chanting the name of God) would get rid of the scars of infectious diseases from the rural areas.[81] It shows compliance to the '*shastric* elements' making '*ayurvedic*' treatments more acceptable to the people who always revered the ecclesiastical intervention without which the infection or 'sin' would not be removed from the diseased bodies. The causality in the vernacular interpretation of '*rog*' and '*asukh*' was believed to be the ad hoc substitution of Godly manifestation where the wrath of 'Providence' was largely seen as '*anugraha*' (favor) to the diseased even after the foundation of western 'scientism' in the Raj [i.e. *mayer anugraha* (favor of Sitala Goddess) which is another name of small pox in Bengal proved to be one of the deadly epidemics in colonial and postcolonial India till 1970s].[82] The early twentieth century *kavirajas*' sayings were validated by the ancient '*ayurvedic*' scriptures with a *hinduic* drift. Professor Satishchandra Roy had contemplated that a 'true Hindu' was not sacred of 'disease' because '*dharma*' or 'religion' would protect him:[83]

"*hindur chele, hindur cele sodai Jodi thake*
Kiser ba rog, kiser ba shok dharma bacay take"
(if everyone be the son of hindu or the disciple of Hinduism,

[81] BSP, BS 1327/1328, *Ayurveda*, 5th Year, no. 1 (Calcutta, 1920-1921): 10-15.
Another entry was from Shusruta Samhita:
"*kusthang jyarasca shosashcya netravishyanda eb ca*
Auposargik rogasco sankramanti norannorom."
[82] Ralph W. Nicholas, "the Goddess Sitala and Epidemic Smallpox in Bengal," *the Journal of Asian Studies* 41, no. 1 (November, 1981): 21-44.
[83] BSP, BS 1327/1328, *Ayurveda*, 5th Year, no. 3 (Calcutta, 1920-1921): 133.

Neither disease nor misery would affect them as long as *Dharma* is there as savior)[84]

In 1920, the British Raj was about to revise the existing Lepers Act of 1898. On 11th March, Sir William Vincent had presented a draft bill of the new Lepers Act in the Indian Legislative Assembly to modify the earlier one. *Swasthya Samacar*, being an ardent supporter of the segregation policy implemented on the 'lepers', was only concerned about the *bhadralok* sufferers. The periodical says:

"We hope that the government will include a couple of provisions in the Act which ensure that the relatives of those rich *bhadralok* leprosy sufferers belonged to the affluent families would not be offended at the time of the isolation."[85]

A few renowned Bengali *bhadraloks* of Calcutta had also envisaged a private hospital in the city for the leprosy sufferers. The scholar physician Pandit Kriparam Sarma[86] with the assistance of Piyush Kanti Ghose[87], the editor of Amrita Bazar Patrika had aimed to build this hospital. It was decided earlier at the meeting which took place in the house no. 12 of Wellesley Street that the sufferers would be provided individual cottage surrounded by herbs, trees, and medicinal plants. After a lot of debate and discussion regarding the site of the hospital, the members had acceded on a couple of proposals. Previously, the scheme was to erect a hospital consisting of a large hall which should be used as the patients' chamber, but, this plan was later on amended. The newer proposition was much impressive; though, it needed greater amount of financial aid and would

[84] BSP, BS 1327/1328, Professor Satishchandra Roy, *Hindu hoi kemon koriya? (How will I become a Hindu?), Ayurveda*, 5th Year, no.3 (Calcutta, 1920-1921): 133.
[85] BSP, BS 1327, *Swasthya Samacar*, 9th Year, no. 1 (Calcutta, 1920): 20.
[86] Pandit Kriparam Sarma, the author of '*Leprosy and Its Treatment'* published in 1911, was an Ayurveda Shastri who got success in curing several leprosy patients in Bengal. See Madhuri Sharma, "Creating a consumer: Exploring medical advertisements in colonial India," in *the Social History of Health and Medicine in Colonial India* Biswamoy eds. Biswamoy Pati and Mark Harrison (Abingdon: Routledge, 2009), 218.
[87] Piyush Kanti Ghosh was the editor of Amrita Bazar Patrika and a prominent figure of the Provincial Hindu Sabha. See Pradeep. K. Datta, "Dying Hindus: The Production of Hindu Communal Common-sense in Early Twentieth Century Bengal," in *Issues in Modern Indian History for Sumit Sarkar*, ed. Biswamoy Pati (Mumbai: Popular Prakashan, 2000), 148.

not give adequate number of beds for the leprosy patients. The *bhadraloks* were in favor of segregating the 'lepers' in the hospitals for the treatment and wished to have more centers alike in the city.[88] However, this realization about the 'health' of the sufferers was not due to the growing novel perception of *bhadraloks* related to the disease, rather, the fear of contagion led them to confine the 'leprous bodies' in the name of hospitalization and care. For more than eleven years, the locals of Midnapore city had been requesting the Municipality to prevent the 'leper beggars' from begging. The city was infested with these sufferers who were truly ulcerous, and they left pus and ulcerated skin wherever they went. This news appeared in the 9th issue of '*Swasthya Samacar*' along with the initiative, which was taken by the Civil Surgeon and the government, for relocating these beggars to a permanent home, probably at Shalbani, Midnapore.[89]

'*Midnapore Hitoishi*' had accused the municipality for not being considerate enough towards the health of the city. A '*muslim* leper' had been buying vegetables in high price from the producers and selling at the market for quite a long period. His condition was deteriorating every day; but, despite informing the municipality a number of times, it could do nothing against that leprosy seller. *Swasthya Samacar* was supportive to this statement and published this news in their issue.[90] Simultaneously, the physicians were looking for the remedies. Dr. Phanibhushan Mukhopadhayay had recorded the outcomes of his leprosy treatment in 1923 by using Dr. Harper's method. In this process, a medicine was prepared with iodine, ether and chaulmoogra. Dr. Harper got significant results by administering this medicine to the innumerable leprosy patients. Moreover, Dr. Mukhopadhayay claimed to have encouraging findings too after utilizing

[88] BSP, BS 1327, *Swasthya Samacar*, 9th Year, no.3 (Calcutta, 1920): 70.
[89] BSP, BS 1327, *Swasthya Samacar*, 9th Year, no. 9 (Calcutta, 1920): 212.
[90] This news, titled as '*Kustha Rogograsta Rogir Anaj Bikray*' (Leprosy patient selling veggies), was reprinted from '*Midnapore Hitoishi*'; BSP, BS 1328, *Swasthya Samacar*, 10th Year, no.1 (Calcutta, 1921): 24.

this medicine.[91] The *Asiatic Researcher* had published a detailed report of medicine produced by Dr. Richardson which reprinted in *Cikitsha Prakash*. With 6% black pepper and 1% arsenic, a mixture was prepared by using glue, and several tablets were made out of that preparation. He directed the patients to take these capsules along with '*paan*' (betel leaves), but, as arsenic is an unsafe metalloid, the consumers were given instruction not to take the tablets if any difficulty occurred.[92] Dr. Ernest Muir's work on leprosy and his steady success had changed the environment of leprosy research from 1920s. The health periodicals started to popularize and translated the treatments, lectures, and articles of Dr. Muir into Bengali. With a special mention to Muir's research, *Swasthya* came to support the western 'modern' treatment that offered hope to the people who still had faith in Kaviraj, '*smriti*' texts and '*ayurveda*'.

"What Dr. Muir said about leprosy is reiterated by many in this country. We have no problem to those who keep faith in Kaviraj's sayings, *smriti* texts and ayurveda, but it is hereby undoubtedly effective to take helps from the modern medical treatments."[93]

The *sankraman* or 'contagion' was the atypical medical thread that shaped the understandings of '*daktars*' concerning the infectious diseases. Chandrakanta Chakravarti, in his text '*Sankramak Rog*', had enlisted some of the major contagious diseases, such as cholera, plague, smallpox, measles, syphilis, gonorrhea, and leprosy with their nature, characteristics, geographical locations, prevalence and incidence and the probable treatments. He was of opinion that this '*bacillus leprae*', was identical with that of the germs of tuberculosis which could die easily, but proved to be deadly than syphilis and tuberculosis. The germ, spread through nasal droplets, sperms, and female orgasm, would affect the plasma cell with spleen, liver, testacies, ovaries and

[91] BSP, BS 1330, *Cikitsha Prakash*, 16th Year, no. 4 (Calcutta, 1923): 137.
[92] BSP, BS 1330, *Cikitsha Prakash*, 16th Year, no. 6 (Calcutta, 1923): 218.
[93] BSP, BS 1331, *Swasthya*, edited by Brajendra nath Gangopadhayay, 3rd year, no. 1 (Calcutta, 1924): 20-28.

kidneys. For him, in the initial stage, the affected person could have gone through mental depression, body ache, fever, and excessive perspiration followed by the second phase where the multiple nodules appeared on the bodies with anesthetic red patches. Thereafter, the bacilli would impair the nervous system of the body, causing the lasting damage to the nerves. Chakravarti had made a classification of leprosy patient in terms of the nature of manifestation, i.e. Tubercular Leprosy and Muscular Anesthetic Leprosy. He also differentiated leucoderma which was non-anesthetic in nature from leprosy. The regions, where leprosy appeared to be prevalent, had been the coastal areas of Africa, India, China, and South America, Philippine Island, and Hawaii Island.[94] He gave a note of advisory to the sufferers regarding the usage of chaulmoogra oil. What people were acquainted with as chaulmoogra oil in the market was not the real one; according to him:

"The oil, which has been sold for many years, is not chaulmoogra but either Hydnocarpic or Gynocardis odorata. Though Hydnocarpic oil is preferably affective in leprosy treatment because of the existence of hydnocarpic acid, the latter has no such medicinal value which could destroy the germs of leprosy."[95]

However, he was in favor of isolating the leprosy sufferers in the society. The 'lepers' should be put into the asylums and barred from having marriages. These were the only two measures that could wipe out the disease. [96] Besides such medical texts, there had been a number of manuals produced for the intent of domestic treatments, popularly called '*garhastha cikitsha*' or 'domestic cures'. In these manuals, the authors did not get into the technical details; instead, they explained the nature of the disease and treatments in a coherent way so that people could identify

[94] BS 1331, Chandrakanta Chakravarti, *Sankramak Rog (Infectious diseases)* (Calcutta: Susruta Sangha, 1924), 72-80.
[95] ibid, 79-80.
[96] ibid, 80.

their symptoms easily and take required action. In '*Swasthya Bidhi O Garhastha Cikitsha*' (the Principles of Health and Domestic Treatment), the author had suggested people to inform the health department immediately after getting infected by leprosy. Every hospital had leprosy department where people could get the treatment free of cost, but the disease should be detected earlier.[97]

The modernization of treatment had surely urged the nationalists to change their stance about the ways in which the 'national health' could be promoted. It was the twentieth century modernity that effectuated the 'scientism' in the propagation of indigenous medicine heralded by the '*swadeshi*' pharmaceutical companies. The mechanisms of western medical treatments were resilient enough to envelop the 'indigeneity' of the 'other' medicines and compelled them to get 'modernized'. This approach was herewith defended and fostered by the nationalist parties who did not want to be identified in any case as 'anti-modern'. The Gandhian idealism, for this reason, was always in sharp contrast to the political motifs of Indian National Congress (INC); although, the issues, such as the resurgence of rural India, the development of indigenous medicines, and the 'cow protection', were often found in the political agendas of Congress against the Raj, the intention was to sensitize the *supposed* 'modern' leanings of indigenous knowledge so that the rational minds could relate them with the national concerns. Dr. Brajendranath Gangopadhayay religiously performed the 'national' duty in his writing '*Kustha Shomosya*' (the Problem of Leprosy), where he assured the readers that leprosy was not highly contagious and could be cured like other contagious diseases, i.e. tuberculosis and pox, if someone received proper diagnosis. The problem remained, though, elsewhere. He was little worried about the response of the society towards the leprosy patients which led to the

[97] A.C Selman, *Swasthya Bidhi o Garhastha Cikitsha* (the principles of health and domestic treatment) (Puna: Orinental Watchman Publishing House, 1930), 267-68.

concealment of the disease. Likewise other skin diseases, people usually ignored the existence of 'leprosy' when it was in formative stage. Thus, the affected person initially had no idea that leprosy already invaded his body. Dr. Gangopadhayay criticized the prior conceptions, saying that leprosy, being a hereditary disease, was the consequence of sin committed in 'previous birth'. Still most of the people, as he thought, believed that it was an incurable disease which did not have any treatment. For him, giving injection was not the only way but cleanliness, nutritious food and medicine, and hope could be equally important in the leprosy treatment. He talked about 'Bengal Immunity' (BI)[98] which had been producing two drugs for the treatment of leprosy for many years, i.e. Sodium Gynocardate and Ethyl Chaulmoogra.[99]

In 1926, Dr. Raghunath Chattopadhyay had written an article, named '*Kustha Roger Notun Cikitsha*' (Modern Treatment of Leprosy), in *Cikitsha Prakash*. The article was dealing with the ulcerous leprosy only, whereas, he completely differed to take 'white leprosy' as one of the forms of such manifestation. The ulcerous leprosy was contagious and bacterial disease entirely different from 'white leprosy' or '*dhabal* or *swet kustha*' which was non-contagious. To Chattopadhyay, the prevalence of '*kustha*' might be greater in the tropical countries, where the infection seemed to be spread by the numerous insects, than that of temperate regions. He had been also familiar with the fact that this ulcerous leprosy nonetheless was subject to abhorrence and had become incurable in the matured stage.[100] The leading physicians of the Bengali '*samaj*' gradually felt the necessity of making the readers and subscribers aware of the newer medical research on this disease and its prevention from 1920s onwards, especially after the foundation

[98] The Bengal Immunity (BI) Company was started in 1919 by a few influential and politically active Bengali *daktars*, developing and supplying serums in order to meet the scarcity of serum production due to war. People such as Dr. Bidhan Chandra Roy, Sir Nil Ratan Sircar, Sir Kailash Chandra Basu and Dr. Charu Chandra Basu were the founder members. See Projit Bihari Mukherji, *Nationalizing the Body*, 57.

[99] BSP, BS 1331, *Swasthya, Kustha Shomosya* (the problem of leprosy), 2nd year, no. 7 (Calcutta, 1924): 193-94.

[100] BSP, BS 1333, *Cikitsha Prakash*, 19th year, no. 6 and 7 (Calcutta, 1926): 245-46.

of CSTM. Prior to this, the articles written or published in health periodicals were largely based on medical hypotheses, conjectures, speculations, and '*ayurvedic*' scriptures. Subsequently, Muir and his associates, pursuing their investigation in the Leprosy Department of CSTM, had influenced the Bengali '*daktars'* to take leprosy into account seriously (See chapter 3).

The health journals were quite satisfied with the works of the 'Mission to Lepers'. At least, this organization had founded the asylums for the 'lepers' that had been still considered as major institutions in India. It published the 53rd Annual Report of the Mission which was named as 'Rays of Hope' and also informed the readers about the foundation of '*Kishorilal Jatiya Homes*'[101] for the 'lepers' in Bankura Leper Asylum by the Governor of Bengal, Lord Lytton in February, 1927. At the same time, the periodicals had reminded about the fewer number of asylums in India which would not be adequate for the existing leprosy population. The '*sama*j', as *Swasthya Samacar* said, should look into this matter as it had responsibility for them too.[102] Bankura district was the most leprosy infested zone amongst the leprosy prone areas of Bengal, but, the reasons were still unknown to the people. Previously, there was no single case of leprosy in the Sarenga village, but, the germ was found gradually in two or three people. In 1928, there were altogether 13 to 14 cases in the village. *Swasthya Samacar* had raised few questions regarding the prevalence of leprosy in Bankura: 1) Were these leprosy patients all local villagers? 2) Were some of them outsiders? 3) Did they often visit the leprosy prone areas? 4) Did they have any contact with the leprosy sufferers 5) If yes, then what were their casts and religion? 6) What were their diets? 7) What was the climatic condition of the village? 8) What were the sources of drinking water in the village, i.e. river, pond, canal, or large tank?

[101] See, 'leprosy problem in Bankura,' *Modern Review,* vol. 43, 467.
[102] BSP, BS 1334, *Swasthya Samacar,* 16th Year, no. 9 (Calcutta, 1927): 298.

Samacar thought that these issues would help the medical researchers to find out the causes of this disease and therefore, it might lead them to get the vaccine.[103] There were two dispensaries at Calcutta for leprosy sufferers in Kalighat and Maniktala operated by the Church Missionary Society (CMS). The reports of both these dispensaries, published in 1930, had shown that there were 359 'lepers' in Maniktala and 106 in Kalighat. Most of them, who had been under the treatment of the CMS, were much infectious, and they could possibly spread germs among the healthy people. As the nature of infectivity was easily perceived, the sufferers were not only to be diagnosed but also they should be put into the asylums with the enforcement of compulsory segregation.[104] It seems, nonetheless, that the health periodicals had frequently pressurized the Raj to take action against the 'lepers' in the cities. However, since 1937 the provincial governments were in impasse in pursuing the compulsory segregation of the 'lepers'. The Minister of Medical and Public Health Department of Government of Bengal (GOB), Nawab K. Habibullah Bahadur of Dacca[105], while presenting his reports in the Bengal Legislative Assembly, had conceded the leprosy problem in Bengal. He claimed that a comprehensive anti-leprosy scheme was already set forth by the GOB, wherein all local bodies had been directed to participate by the Director of Public Health. A sum of Rs. 30,000 was also to be spent in the various anti-leprosy schemes.[106]

Whatsoever, the journals continued to discuss about the effectiveness of indigenous herbs for leprosy treatment during 1930s and 40s in the midst of such discomfort related to the vagrant 'lepers'. For example, Baidyaranjan Kaviraj Indubhushan Sen Ayurvedshahstri wrote an article

[103] BSP, BS 1335, *Swasthya Samacar,* 17th Year, no. 6 (Calcutta, 1928): 189-90.
[104] BSP, BS 1338, *Swasthya Samacar,* 20th Year, no. 2 (Calcutta, 1931): 61.
[105] Nawab Khwaja Habibullah Bahadur, the son of Nawab Sir Khwaja Salimullah Bahadur, was the fifth Nawab of Dhaka. He was Medical and Public Health Minister in the Cabinet of A.K Fazlul Haq from 1937-1941.
[106] See *the 3rd Annual Report of the Provincial Autonomy in Bengal: Being a report of the work done by the GOB from 1st April 1939 to 31st March 1940* (Calcutta: Bengal Government Press, 1941), 127.

titled '*Amader Desher Gachpala*' (the Vegetation of Our Country) in '*Swasthya*' where he mentioned that the roots of '*punarnaba*' (a sort of spinach), with a thin layer of curd, had to be crushed, after that it must be used as an ointment on the leprous ulcers.[107] In another article, Sen had explained the value of using the extract of bark of '*sajina*' or morunga plant on the ulcers of leprosy patients; on the other way, kneading the oil of '*sajina*' seeds over the bodies of the sufferers would be equally beneficial.[108] Dhirendranath Roy, referring to the various indigenous plants in his writing, had described how the leprosy patients, according to Chakradutta, could be treated with medicinal herbs like moonseed leaves or '*gulanca*' (*Menispermum glabrum*),[109] and 'neem' (*Azadirachta indica*). The extract or bark of neem was to be frequently applied to the leprosy sufferers, both these articles appeared in *Cikitsha Prakash* in 1932.[110]

Apart from that, a few physicians had published medical texts for both students and laymen. '*Sahaj Daktari Sikkha*' (the Comprehensive Guide for *Daktars*), written by S.C Das, was one of those books explaining the various critical diseases in a 'cogent' way. Leprosy would occur, according to Das, due to consuming both fish and milk in a meal, excessive intake of meat or taking siesta.[111] However, the 'leprosy sufferers' were still considered problematic, than the disease itself, to the state and society in 1940s and this was reflected in the articles of contemporary physicians. Dr. Debaprasad Sanyal, in his '*kustha byadhi*' (The Leprosy), had pronounced the 'leprosy patients' as the perils to the society because of their ability to spread the

[107] BSP, BS 1338, Baidyaranjan Kaviraj Indubhushan Sen Ayurvedshahstri, *Amader Desher Gachpala*, (the vegetation of our country), *Swasthya*, 9th Year, no. 4 (Calcutta, 1931): 111.
[108] BSP, BS 1339, Indubhushan Sen, *Bharatiya Vesaja Tattva (Indian Pharmacology), Cikitsha Prakash,* 25th Year, no. 3 (Calcutta, 1932): 112.
[109] BSP, BS 1339, Kaviraj Dhirendranath Roy, *Bharatiya Vesaja Tattva (Indian Pharmacology), Cikitsha Prakash,* 25th Year, no. 9 (Calcutta, 1932): 341.
[110] BSP, BS 1339, Kaviraj Dhirendranath Roy, *Deshiya Vesaje Gobeshana (Research in Indian Pharmacology), Cikitsha Prakash*, 25th Year, no. 7 (Calcutta, 1932): 266.
[111] BS 1338, S. C Das, *Sahaj Daktari Sikkha* (the Comprehensive Guide for *Daktars*) (Calcutta: published by Saratchandra Sheal, 1931), 623-24.

bacilli. He was also the pro-isolationist preferring to segregate the diseased in the leprosy asylums which must be situated at a healthy environment and the patients were to be provided the space of recreation to prevent the plight from the asylums. The sufferers should not be allowed to roam around the streets or to beg. For Sanyal:

"It is most unfortunate that in our country and even in Calcutta, the 'lepers' are begging at the streets and staying at the pavements. They often enter into the residences to beg and do not hesitate to abuse the residents if they are asked to leave."[112]

At the same time, Sanyal was sympathetic towards the sufferers and he advised them to take proper diets, have more vegetables than proteins. Besides, as the leprosy patients were prohibited to socialize with the people, they supposed to get the necessary means, such as reading newspapers and books, listening radios to enhance their psychological strength. So far the treatments are concerned, there were several medicines mentioned by Sanyal, i.e. '*Antileprol capsule*', '*Chaulmoogra oil*', '*Moogrol or ethyl chaulmoograte*', and '*Alepol or Sodium Hydnocarpate*', that would cure the disease.[113] This article was, nonetheless, an example of ideal blend, covering the issues related to 'prevention', 'care', and 'cure' (PCC) altogether. The PCC model had been, hereby, followed by most of the medical professionals in their articles during 1940s in which the 'prevention from the lepers' was immensely prioritized than any other factors. Meanwhile, the 1943 famine had further deteriorated the public health of Bengal. Due to Churchill's wicked policies concerning the exportation of food grains for the British army fighting at the fronts,[114] the condition of Bengal exponentially worsened and the British Raj had

[112] BSP, BS 1350, Dr. Debaprasad Sanyal, *kustha byadhi* (The Leprosy), *Cikitsha Prakash*, 36th year, no. 1 (Calcutta: 1943): 275.
[113] ibid, 275-78.
[114] Madhusree Mukerjee, *Churchill's Secret War: the British Empire and the Ravaging of India during World War II* (New York: Basic Books, 2011), 104-48.

been more inclined to resolve the Burma issue than the problem of food shortage and public health. Wavell started touring Bengal after he had arrived in India in October, 1943. He alleged the Bengal administration for being corrupted and dishonest in misappropriating the relief fund and embezzling food grains. By January, 1944, Wavell founded 347 civil emergency hospitals and 18 large military hospitals and appointed 1,700 extra public health staff.[115] But the initiative was likely to be much insignificant in comparison to the magnitude of the problem. The report from the Secretary of State for India, dated 26th December, 1943, had informed the Empire that Bengal famine was followed by the serious outbreaks of cholera and malaria in Bengal. It also conceded the fact that India generally had a shortage of drugs, although, the Raj made an effort to stabilize the drug and vaccine supply which seemed useless as the number of cholera and malaria cases surged in 1944.[116] The public distribution system was entirely collapsed to the extent that the GOB failed to find any scrupulous way to resolve the issues. This inability had been reflected in the narrative of the Secretary of State:

"The health situation in Bengal consequent upon the famine remains very serious. Between 27th June and 27th November, 1943 it is believed that 87,845 persons died of cholera in the Province and the death rate from this disease average in November 4,864 per week against 5,349 per week in October. Malaria is affecting a high percentage of those suffering from under nourishment, which has reduced their usual comparative immunity to the disease. Stocks of quinine in India are substantial and large quantities of anti-malarial synthetics have been offered to the Government of India from the United Kingdom. But the arrangements for the distribution of

[115] Barney White Spunner, *Partition: the Story of Indian Independence and the creation of Pakistan in 1947* (New York: Simon & Schuster, 2007), 32-35.

[116]Nehru Memorial, Museum and Library (NMML), Private Paper Archives and Manuscript Section, Cabinet Papers, Vol. IV, S. No. 167, 26th December, 1943, social and economic policy for India: A Memorandum by the Secretary of State for India.

supplies inside Bengal have been faulty. Dysentery and small pox threaten to add to the death roll."[117]

There was also a great difficulty in recruiting doctors, subordinate public health staffs and nurses which usually occurred, as far the Secretary of State had opined, because of retaining the communal ratio in government appointment.[118] However, the scarcity of medical staffs continued till the mid 1944, when GOB finally agreed to assume control over hospitals from the district authorities. The Secretary of State, on 27th April, 1944, had voiced for central legislation to give provincial govt. required power.[119]

Altogether, the public health in Bengal was under serious threat. Meanwhile, the Bengali periodicals and newspaper continued to deliberate the questions on leprosy and its treatment with a newer approach after independence. The editors had definitely succumbed to the nationalist ideas, encircling the concerns that were precisely related with sort of political transfiguration. For which, the post-independent state needed a plan of 'revival' of indigenous medicine and 'recovery' from the antiquated modus operandi (although the GOI was not able to replace the colonial settings, instead, it has adjusted with the existing normative). The public health was one of the baffling zones in this regard. Dr. Ashutosh Roy, the medical officer of Purulia Leper Home and Hospital, had written an article on '*Kustha Byadhi*' or leprosy in *Mukti* immediately after Gandhi's death in 1948. He presented a comprehensive history of leprosy before discussing its present incidence in India and the probable treatments. The author had stated that only 20% of leprosy cases were contagious in India and it could be cured by administering chaulmoogra oil

[117] See ibid, S. No. 171, 25th Jan, 1944: Report by the Secretary of State for India.
[118] NMML, Private Paper Archives and Manuscript Section, Cabinet Papers, Vol. IV, S. No. 180, 1st March, 1944: Report by the Secretary of State for India.
[119] See ibid, S. No. 187, 27th April, 1944: Report by the Secretary of State for India.

injection which eventually was more effective than allopathic medicine like Promin, Diason, Sulfatron. Moreover, Dr. Roy had seconded the opinions of twenty seven physicians which were published in 1947, 12th January, i.e. leprosy is a disease not the curse of the Providence, there is no shame to be infected by leprosy than tuberculosis, typhoid, or pneumonia, it was neither hereditary nor caused by syphilis, most of the leprosy patients in India are non-contagious and they should not be barred from travelling around.[120] In the first Five Year Plan (1FYP) of independent India (1951-56), along with the foundation of leprosy clinics in the hospitals, importance was given on the investigation of leprosy in the states where this disease was truly a public health problem. Group isolation of the 'lepers', such as rural colony, had been encouraged voluntarily, supported by grants-in-aid.[121]

Conclusion

Despite such assurances, the '*samaj*' continued to feel discomfort with the appearance and wandering of the '*kustha rogi*' even in the post-independence period. There were a number of political and cultural motives due to which this social psyche against the 'lepers' was persisted in the '*samaj*'. The extent of dissension related to leprosy sufferers was far dynamic in the Southeast Asia than what had been usually observed in the western societies. As Indudharan Menon has pointed out that there would be a little doubt in the academia about the progress of indigenous medical system in India which had evolved for centuries prior to the colonial rule, but, it changed its maneuvering rapidly than ever before during the British aegis.[122] The process of marginalization, acculturation, and substitution happened in an unprecedented, albeit

[120] BSP, BS 1354, Dr. Ashutosh Roy, *Kustha Byadhi (leprosy), Mukti*, 9th year, no. 13 (Purulia, 1948): 8-10.
[121] See *the Summary of Recommendations of the First Five Year Plan 1951-56* (New Delhi: Government of India Press, 1953), 85-93.
[122] See Indudharan Menon, *Hereditary Physicians of Kerala: Traditional Medicine and Ayurveda in Modern India* (New York: Routledge, 2018), 1-10.

byzantine way, which was hardly seen in the western societies. With the germination of colonial medicine, the manifold therapeutics had largely succeeded to disseminate the knowledge of diseases, which were prevalent in the colonized societies, alongside their symptoms and treatments. Therefore, the emerging plurality in medical narratives would have removed the major difference between '*rog*' (disease) and '*rogi*' (diseased) in the '*samaj*' which made the concept of 'unclean' and 'unhealthy' universalized. Interestingly, no other diseases were conjoined with the terms such as 'dirty', 'unclean' or 'filthy' so frequently than those with leprosy. Perhaps, since the nineteenth century, both the contagionists and environmentalists had perceived the 'leprosy patients' as 'lepers' and eventually they identified the latter with 'problems'. It was only during 1950s when this word had been replaced by the term 'patients', at least academically. But, how far does the social psyche dehumanize such 'diseased' individuals? The scholars are unable to bring out the voices of the leprosy sufferers in the colonial period from the medical and missionary interpretations with 'cure and care', which dexterously hushed up the 'real' perception of the '*rogi*'. Manik Bandopadhayay in his '*Kustha Rogir Bou*' (the Wife of a Leprosy Patient) has perfectly illustrated how a supposed rational being, who gets infected by leprosy, has considered himself as a 'putrefied body', roving between the 'modern' treatments and religious aphorism. Manik seems to have depicted the domestic world of a Bengali middle class '*kustho rogi*' who does not want to see any healthy body around him, including his wife. While living an isolated life, the sufferer once has intended to transmit the germ to his wife so that she could go through in a similar way of agony.[123] This fiction, to a great extent, has explained not only the psyche of a leprosy patient and his companion, but also the familial strain, conflict, and friction around a 'disease' which were unaddressed prior to Manik in Bengali

[123] Manik Bandopadhayay's collection of short stories '*Kustha Rogir Bou* '(the Wife of a Leprosy Patient), ed. Abdul Mannan Syed (Kolkata: Abashar prakashan, 1998) 50-60.

literati '*samaj*'. While narrating the intricate relationship of a couple, Manik is asking remedy of this 'disease' not to any physician but to '*samaj*' which was very much present in the story although passively.

Till the mid twentieth century, the medical fraternity of Bengal had to experience numerous issues such as the refugee influx, the communal tensions, and the popular movements against the post-independent statecraft. During this period of uncertainty, '*kustha rogi*', who was easily accused of bringing misfortunes along with spreading '*germs*', had become more likely detested by the '*sustha samaj*' (healthy society). The colonial stigma around 'leprosy' was galvanized through legislation, medical research, missionary care, and '*swasthya sikhsha*'. This four-tier system of hegemonization appeared to found the concept of '*swasthya*' on a robust platform that misappropriated the idea of 'health' and used 'medical narratives' as the weapon to the 'unhealthy'. Scholars may have argued that the '*samajikata*' or socialization had prevented the Bengali *bhadraloks* to counter or challenge the colonial directives related to contagious diseases, although, it was the urge for presenting an alternative discourse in medical practices that induced the '*grihastha*' to sympathize with the '*hindu rogi*', experiencing the hardship in the colonial modalities.

Whenever there is an academic engagement about the role of indigeneity in promoting indigenous medicines as the complementary homily during the Raj, the etiology of 'indigeneity' itself is problematic for analyzing the development of '*deshiyo*' medicinal systems. The indigenous pharmaceutical companies, aiming to produce '*deshiyo*' remedies, had systematically publicized the indigenous drugs along with commercializing the allopathic medicine. Since the early quarter of the twentieth century, the indigenous production of allopathic drugs was commenced but with a slow-mo as the pharmaceutical industry 'remained highly

undeveloped'.[124] The companies, such as Alembic in Parel and Baroda and the Bengal Chemical and Pharmaceutical Works in Calcutta, had found a way in producing drugs by using components of '*ayurvedic*' medicine and knowledge of pharmacology with the help of modern chemistry and western biomedicine. In the inter-war period, small firms like Dabur shifted to manufacture allopathic medicines for acquiring more profit, whereas, the eminence of '*ayurvedic*' medicines was facing trouble. The multinational corporations, seeing the shortcomings of the indigenous industries, had soon changed the power balance of the medical markets in India after the war. Largely, the paucity of capital and the lesser technology seemed to have marginalized the indigenous pharmaceutical companies.[125] The scholars are more leaned to study the '*Swadeshiness*', which was connected with advertising the indigenous medicines, while ignoring the heterogeneity of the medical markets. Nandini Bhattacharya has pointed out that the apparent 'indigeneity' existed in the pharmaceutical markets of the Raj was carefully nurtured by the nationalist school, making the binaries such as '*ayurveda*-allopathic', indigenous-foreign etc. In reality, the indigenous companies had produced a range of medicines, including '*ayurvedic*' and '*hakimi*', of which some might not be '*deshiyo*' or indigenous by origin. Despite the nationalist or state intervention, the drug market in colonial India was entirely uncontrolled.[126]

The corporatization of indigenous drug productions led to the both exclusion of 'indigeneity' and composition of 'national interest'. Therefore, the efficacy of 'chaulmoogra oil' and other Indian herbs had lost its '*deshiyo*' character once these indigenous medicines were corporatized to

[124] Neshat Quaiser, "Science, Institution, Colonialism: Tibbiya College of Delhi, 1889-1947," in *Science and Modern India: An Institutional History, c.1784-1947: Project of History of Science, Philosophy and Culture in Indian Civilization, vol. 15, part 4*, ed. Uma Dasgupta (New Delhi: Pearson Longman, 2011), 546.
[125] Madhulika Banerjee, "Ayurvedic Pharmaceuticals: Contesting Economic Hegemony," in *Contesting Colonial Authority: Medicine and Indigenous Responses in Nineteenth- and Twentieth-Century India*, ed. Poonam Bala (Lanham: Lexington Books, 2012), 40-41.
[126] Nandini Bhattacharya, "Between the Bazaar and the Bench: Making of the Drugs Trade in Colonial India, ca. 1900-1930," *the Bulletin of the History of Medicine* 90, no. 1 (Spring, 2016): 61-91.

survive in the drug market and to compete with the emerging allopathic biomedicine that became fundamental in the medical treatments during the postcolonial period. The nationalization of the '*ayurvedic*' companies, so far, would not enough to ameliorate their status in this age of medico-commercialism. After the invention of sulfan drugs, the treatments in leprosy had similarly taken a new turn leaving the 'indigenous' ways of diagnoses at the mercy of the governmental assistance. This chapter, thus, attempts to undertake the heterogeneity of various '*cikitsha*' or treatment and '*osudh*' or medicine related to leprosy in colonial Bengal and the medical plurality which had shaped the identities of the 'diseased' in Bengali '*samaj*'.

CHAPTER 6

Conclusion

'The first step in solving a problem is recognizing there is one'- the statement made by Will McAvoy, a fictional character in the TV series '*Newsroom*', should be the practical diagnosis for the irresolution that a government has been subjected regarding public health since 1947. It would be imprudent to wind up the arguments without demystifying the political conundrums and uncertainties regarding the postcolonial health policies on leprosy in India. In 1949, Dr. V. Subramaniam had asked the Union Health Minister Amrit Kaur about the reason following the unavailability of the proper comprehensive health statistics, more precisely, the statistics concerning the number of 'lepers' in India. Kaur had complied with the fact that the health statistics in India were not only defective, but also unable to provide any conclusive information on the increasing incidence of leprosy, which, to Kaur, seemed to be doubtful.[1] Probably, the Constituent Assembly of India could not obtain the figures of the sufferers due to the Partition, triggering one of the largest population exoduses in the history of humanity. This was supposed to be problematic to the health department for preparing a detailed report on the leprosy sufferers as a large fraction of them, mainly the beggars, tramps, and hidden cases, could have travelled to East or West Pakistan or the other way around. But that too might not be the exclusive reason for depletion or escalation in the figures of leprosy sufferers in India. For Kaur, during the post-Partition period, the affected people had been treated in the general hospitals, having general wards and special wards for the non-infective and infective cases respectively, in the Madras province, Central provinces and Berar, Bihar, Orissa, and East Punjab. Alongside, there were also special leprosy hospitals and clinics in different parts of India. Again, Subramaniam sought

[1] See *the Constituent Assembly of India (Legislative) Debates, part 1, vol. 1, no.7* (Wednesday, 9th February, 1949), 430-31.

to discern the governmental standpoint over the segregation of highly infective cases and, in that respect, what sort of preventive measures the Indian government was taking to fight against the disease. In reply to those queries, Kaur, like the colonial predecessors, simply put the accountability to the provincial administrations for preventing and treating leprosy in their respective provinces. For research and development in leprosy, the Government of India (GOI) had appointed a Committee to report on the question regarding the foundation of a Central Leprosy Research and Teaching Institute (formerly known as Lady Willingdon Leprosy Sanatorium, Chengalpattu, Tamilnadu).[2] When Shri Kanhu Ram Deogam[3], one of the members of the first Lok Sabha (Lower House of the Parliament of India), had requested Amrit Kaur in 1956 to furnish the details about the number of 'lepers', 'leper beggars', and leprosy asylums in India, Kaur surprisingly was not able to present the accurate figures; instead, she came up with the estimated number, i.e. around 1.5 million which was sixfold than previous figure (250,000) of 1949, suffering from this disease. No survey was taken either to find out how many drifters were afflicted by leprosy, except the identification of the states, such as parts of Assam, West Bengal, Bihar, Orissa, Madhya Pradesh, Madras, Travancore-Cochin, Hyderabad, Uttar Pradesh, and Bombay, where the disease was highly endemic. To initiate anti-leprosy programs, the Report of the Committee for the Control of Leprosy, containing the recommendations on the '*steps to be taken for the segregation of leprosy patients*,' had been distributed to the state governments.[4] The inability in revealing the exact number of ailing population is the major syndrome of postcolonial governances, inheriting from its antecedents. It appears that the GOI had been worried more about unbolting the 'figures' of unhealthy, causing humiliation and

[2] See *the Constituent Assembly of India (Legislative) Debates, part 1, vol. 1, no.7* (Wednesday, 9th February, 1949), 430-31.
[3] Shri Kanhu Ram Deogam, member of Jharkhand Party, was elected from Chaibasha in the first General Election of India 1951. He was the social reformer since 1918 and General Secretary of the 'Ho Samaj Mahasabha' since 1928.
[4] See *Lok Sabha Debates, Part 1, vol. 3* (Monday, 7th May, 1956), 3436.

infamy before the decolonized world, than sweeping the challenges under the 'rugs' of 'National Programs'. The National Leprosy Control Program (NLCP), which was already launched in 1955, had completed its first anniversary in 1956 when Amrit Kaur responded to the questions on leprosy in the parliament. As she was the first Chairman of the Hind Kusth Nivaran Sangh (HKNS) from 1950, and one of the early exponents of the leprosy elimination in India, it is quite unexpected that Kaur was not aware of the precise leprosy figures in India.[5] Whatsoever, this 'approximation', used often in expounding the diseases prevalence and incidence, ultimately proves to be thorny encumbrance in effectuating the public health programs even in this digital age. On 19th April, 1955, Dr. Rajendra Prasad in his Presidential Address at the Annual General Meeting of the HKNS had asserted the cooperation amongst the voluntary organizations such as the Mission to Lepers, the Gandhi Memorial Leprosy Foundation, and the governmental effort which was reflected in NLCP. The major prerequisites in leprosy work, to Prasad, were the knowledge, money, and personnel. He appealed philanthropists and the Indian citizens to foster the work of the organizations and contribute in this 'most compassionate service'.[6] Nevertheless, the anti-leprosy programs had taken a backseat until the invention of Multi Drug Therapy (MDT) in 1980s.

Since the official initiation of National Leprosy Eradication Program (NLEP) by the GOI in 1982, the objective is to eliminate the disease from the country, but unfortunately a little has been achieved in this regard. Although, the elimination of leprosy was attained at national level in 2005, almost 57% of the world's leprosy affected people still reside in India. For which, the GOI has undertaken few programs to riddance the disease completely for many years. The Post

[5] Rajkumari Amrit Kaur, although, had acquainted with the condition of Punjab and PEPSU. She presented the accurate details of the leprosy colonies and number of patients who received indoor treatment in those homes/colonies; see *Lok Sabha Debates, Part 1, vol. 3* (Wednesday, 2nd May, 1956), 3217.

[6] See 'Hind Kusth Nivaran Sangh, Presidential Address, Annual General Meeting, 19th April, 1955,' in *the Speeches of President Rajendra Prasad, 1952-56* (New Delhi: Publication Division, 1958), 332-33.

Exposure Prophylaxis (PEP) had been set off for all contacts of leprosy cases from 2nd October, 2018 under NLEP and the Sparsh Leprosy Awareness Campaign (SLAC), 2018. It was performed as an annual movement from 30th January to 13th February to spread awareness about leprosy. To commemorate the 150th Birth Anniversary of Mahatma Gandhi, the Central Leprosy Division, Ministry of Health and Family Welfare, the GOI had launched a one year comprehensive campaign called 'Sparsh Leprosy Elimination Campaign' (SLEC) from 2nd October, 2018 to till 2nd Oct, 2019 with an aim to reduce the new leprosy cases of Grade II disability less than one per million population. However, the scenario is much bleaker in contrast to the figures presented by the Indian government. Recently, '*The Tribune*' has published a report on 17th January, 2020, showing that about 7,000 leprosy cases are reported in the last decade in Punjab. Earlier, in 2018, the child leprosy rate in that state, including Tamil Nadu, Dadra and Nagar Haveli, Bihar, Mizoram, and Arunachal Pradesh where the rate was varying between 14% and 23 %, was more than the national average of 9 per cent. There are around 30 leprosy colonies in Punjab with almost 2,000 patients.[7] The colonial concerns about the leprosy sufferers and the effort to confine their habitual 'nuisance' are equally followed by the postcolonial state in a modified way along with the governmental awareness campaigns. Despite having 'resilient' programs to purge this disease, the GOI would not get preferred result; rather, the politicization of health revolving around the execution of the programs has led to the continual failure.

The promulgation of health programs, though, is the responsibility of state governments; however, a few major plans like malaria or filarial control, family planning, and leprosy control

[7] See '*The Tribune'*, published on 17th January, 2020; https://www.tribuneindia.com/news/punjab/about-7-000-leprosy-cases-reported-in-last-decade-27488; this newspaper has used the term 'leper' which has been called off many years before by the scholars as it carries a 'derogatory' sense, justifying the 'socio-medical alienation'.

appear to be supported by the central administration in India since the First Five Year Plan (1FYP). The total expenditure on health had increased from Rs. 11.7 crores in 1951 to Rs. 36.6 crores in 1956. Following the recommendations of the Bhore Committee, almost 725 primary health centers were established for which the government needed a number of trained health workers to operate those centers. During this period, the re-orientation training centers for the health professionals had been founded at Singur, Poonamalle, and Najafgarh. In Bengal, the All India Institute of Hygiene and Public Health had started one year's course in public health.[8] In 1950s, several Disease Control Programs (DCPs) were taken, such as, the National Leprosy Control Program (NLCP) in 1955, the National Malaria Control Program (NMCP) in 1953, and the National Filaria Control Program (NFCP) in 1954; all of them initially got success. In 2FYP, the gross expenditure invested in these fields, including housing and urban and rural planning, development of 'backward classes', social welfare and prohibition, and rehabilitation of displaced persons, was Rs. 474 crores increased to Rs. 736 crores in 3FYP. The objective was to expand the health services as far as it could reach out to the people in need; nevertheless, most of the issues were already identified in 1FYP.[9] It seems that the postcolonial governments had to be engaged more in making 'policies' rather than diligently addressing the health problems. For instance, the National Smallpox Eradication Program (NSEP), launched in 1962, was one of those striving programs that were heaved in by the administration. Almost 60 million primary vaccinations and 440 million revaccinations had been performed in 1966, however, the result was immensely unsatisfactory as the program failed to reach large number of people in the rural areas. This logistical problem was furthered by the individual reluctance and ignorance concerning the vaccination program. The GOI in association with the World Health Organization

[8] See *the Review of the First Five Year Plan* (New Delhi: Govt. of India Press, 1957), 272-283.
[9] See *the Third Five Year Plan* (1961-66), 171-180.

in 1970s had come up with effective scheme to eradicate this disease by giving importance to inclusive campaigns, production, and distribution of vaccines at cheaper rate and survey. Finally the International Commission for the Assessment of Eradication of Smallpox in India had certified India as smallpox free country in 1977. The question of entitlement to get the essential Public Health Services (PHS), although, was still depressing. What 1FYP had mentioned as pertinent problem in public health of India, i.e. economic inequality, was not accordingly pondered in the later health programs. Somehow, the GOI has started to consider this predicament different than that of health which is as a matter of fact inseparable from the economic development. Dr. A. K Bose (?) in his address, at the 13th Bengal Provincial Medical Conference in 1953, had clearly mentioned about the correlation between medical and the other social crises in India:

"Medical problem is not an isolated problem, it is inter-related with other problems of our society. Wherever and whenever we have tried to solve any social problem without a realization of its wider implication we had taken wrong steps."[10]

The health programs, whatsoever, did have impact on the public health of Bengal. The Mudaliar Committee (1962), under the Chairmanship of Dr. A. Lakshmanaswami Mudaliar, had recommended for strengthening of the district hospitals and upgrading the PHCs in the rural/urban areas. Likewise, the other committees, such as Chadha Committee (1963), Mukherjee Committee (1966), Jain Committee (1966), Kartar Singh Committee (1973), Srivastava Committee (1975), had provided similar suggestions concerning the improvement of Public

[10] See the *Journal of Indian Medical Association* 23, no.5 (February, 1954): 223.

Health Centers (PHCs) and PHS in India;[11] Unfortunately due to the political encounter, swelling corporatism, and oppositions, these recommendations are hardly taken into practice. The inability of postcolonial governance to resolve the public health issues, within a federative political mapping, is largely wrapped up by the unwarranted documentation of 'health programs' that ultimately hides the reality 'on paper'. After the Partition of 1947, West Bengal had undergone immense crisis owing to political and economic instability. The refugee influx from East Bengal that continued till 1971 of Bangladesh Liberation War, the political and ideological strife between the far leftists and the congress workers, and the recurring peasant and worker movements were bringing in newer political equation in West Bengal during 1960s and 1970s. After the formation of the first communist government in 1977, one of the initial approaches of the Government of West Bengal (GoWB) was to revive the PHS and the Rural Health Care (RHCs) and to develop the Integrated Health Care Service (IHCS) in the rural areas.[12] Meanwhile, the International Conference of WHO on primary health care in 1978, later known as Alma Ata Declaration, had accepted the importance of IHCS and the primary health care which should be ensured by the 'States'.[13] This altogether influenced GOI to formulate the National Health Policy in 1983 to provide universal and comprehensive PHS to all.[14] In this context, the works of GoWB have to be evaluated. It is true that the activities of the health workers and the Local Health Service Providers (LHSP) had increased in post-1977 period, but, they did not offer any specialized medical services which were available only in the RHC centers. The health workers had hardly visited the rural areas or induced people for better health

[11] See *the Reports of Mudaliar Committee* (1962), *Chadha Committee* (1963), *Mukherjee Committee* (1966), *Jain Committee* (1966), *Kartar Singh Committee* (1973), *Srivastava Committee* (1975).
[12] C. N Ray, *Health Care and Problems of Health Development: A Study of some West Bengal villages, working paper no. 80* (Lucknow: Giri Institute of Development Studies, 1985), 1-19.
[13] See *the Alma Ata declaration, 1978, International Conference of WHO on Primary Health Care*.
[14] See *the National Health Policy, 1983.*

care. In pre-1977 period, the strategy of Health Care Facility (HCF) in West Bengal was dependent on curative means, western mode of treatment, and hospital orientation. This seemed to be changed radically with the introduction of Community Health Scheme (CHS) in post-1977 period. The CHS had stressed on the health team approach to relate the programs with target population and it also had given substance on the preventive measures than that of curative actions, however, there was no such considerable improvement seen in public health and hygiene due to economic backwardness and non-availability of resources.[15] An unassailable decentralized socio-political system was urgently needed to ameliorate the public health care in West Bengal. With the establishment of Panchayati Raj in 1992, the GoWB had intended to reinforce the PHCs in the rural areas and support the local panchayats with adequate financial aids.

In reality, the role of Gram Panchayat (GP) has made no such difference in disseminating the health consciousness amongst the people. The GP, which is the grassroots institution of this democratic governance, is assigned to implement government public health programs in the rural areas with accountability, although, it fails to monitor the execution of public health programs during the course of action. Undue politicization of GP leads to lack of initiative which, in turn, ruins the public health statistics. Another reason behind the failure of health programs in West Bengal is the scarcity of health professionals or physicians in the rural area. In 2009, the GoWB had passed a bill to offer three year diploma course to the health workers in order to deploy them in rural Bengal, but this scheme was contended by the Medical Council of India (now replaced by National Medical Commission from 25th September, 2020) and the Indian Medical Association; as a result, the PHCs are facing numerous impediments to carry out the works with

[15] Ray, *Health Care and Problems of Health Development*, 1-19.

the help of a few health professionals and physicians.[16] This structural problem has worsened the condition and intensified agony of the people affected by the Neglected Tropical Diseases (NTDs), such as leprosy. In 2014-15, the GoWB seemed to be anxious after observing the unprecedented increase of leprosy patients in the state including Kolkata. Most of the patients were at the advanced stage, indicating the collapse of the leprosy detection procedures. The public health officials had conceded that there was no such awareness program taken in 2014-15, consequently, the number of leprosy cases increased to 10.72 per 100,000 populations in 2014-15 from 9.60 in 2013-14. In Kolkata, the cases were even higher as much as 925 (almost 10.77 per 100,000) in 2014-15 in comparison with 548 cases in 2013-14. The Kolkata Municipal Corporation (KMC) was alleged, by the Health department, for not carrying any program in the city which hindered the progress of the leprosy elimination.[17] In the environ of such arraignment between governmental bodies, the Leprosy Case Detection Campaign (LCDC), which mobilized almost 300,000 health workers along with the Accredited Social Health Activists (ASHA), had found large number of 'hidden cases' in the 149 districts across 19 states in India.[18] According to the report, around 20,000 cases had been detected in this massive campaign within three weeks, spiking the figure to 127,326 in 2015-16 from 125,785 cases in 2014-15.[19]

However, in spite of undertaking these courses of action, there is no such significant improvement in leprosy and general medical education among the people as well. The ineptness

[16] Satyabrata Chakraborty, "Lost Decades? Human Development in West Bengal with Special Focus on Health," in *West Bengal under the Left 1977-2011*, eds. Rakhahari Chatterji and Partha Basu (New York: Routledge, 2020), 23.
[17] See Parijat Bandopadhyay, "Kustha rogir sonkhya briddhi te dishahara rajya," (Increasing numbers of leprosy patients confuse the state government), *Anandabazar patrika*, Kolkata, published on 4th May, 2015. https://www.anandabazar.com/calcutta/increasing-numbers-of-leprosy-patients-confuse-state-government-1.141640.
[18] See *the Report of World Health Organization (WHO) on India's massive leprosy case detection campaign reaches 320 million people*; https://www.who.int/neglected_diseases/news/India_massive_leprosy_case_detection_campaign_reaches_320_mill/en/.
[19] See "At Least 20,000 hidden cases of leprosy identified in less than a month," *Down To Earth*, published on 14th October, 2016; At least 20,000 hidden cases of leprosy identified in less than a month (downtoearth.org.in).

in removing the stigma associated with leprosy is the principal failure of the postcolonial administrations and medical bodies. People still are ostracizing numerous 'deviants', having no connection with the disease, as 'leprosy sufferers'.[20] The leprosy ghettos or colonies are the most deprived areas in West Bengal. In some cases, the land mafias tried to grab the lands of leprosy colonies. For instance, the residents of Lachipur Mahatma Gandhi Kustha Palli, Kulti, founded in 1957, had complained to the administration about the land grabbers, trying to expropriate the colony's lands for sale.[21] Moreover, the leprosy colonies in West Bengal [according to one of the reports of Association of People affected by Leprosy (APAL) in 2018, there are 35 leprosy colonies in the state][22] were experiencing governmental dejection in obtaining even the basic amenities. Recently, the health officials have been little skeptical regarding the lower prevalence rate of leprosy in the state, as the increasing trend of child leprosy does indicate towards the ongoing active transmission.[23] They are of opinion that probably this transmission occurs through the bodily contact with the affected people. Therefore, such claims of having the 'improved condition' in the leprosy affected areas are mostly proved to be contradictory, displaying in the governmental reports. This state of affairs would not change until a considerable share of the Gross Domestic Product (GDP) has been invested to the development of public health system in India. In the Union Budget of India 2020-21, less than 3% of GDP are allotted for the health care, which is highly inadequate for 'any major leap forward in the

[20] See Piyush Nandi, "Kustha Sondehe prouro ke achhuyt korar obhijog," (outcasting a man alleged of leprosy), *Anandabzar Patrika*, Kolkata, published on 10th February, 2017. https://www.anandabazar.com/district/howrah-hoogly/allegation-for-outcasting-a-man-in-the-name-of-leprosy-1.561860.

[21] See the report on land grabbing of 'leprosy colony', published by a correspondent of *Anandabzar Patrika*, Kolkata, on 5th June, 2017; https://www.anandabazar.com/district/bardhaman/land-allegedly-occupied-by-villagers-at-kulti-1.623465.

[22] Association of People affected by Leprosy (APAL) previously known as National Forum is a national networking organization of people affected by leprosy which was founded in 2006 in association with the Nippon Foundation, Japan. It is the brainchild of Mr. Sasakawa, working for the affected population and their families.

[23] See "Sad State of Leprosy Colony at Jamuria," *Anandabazar Patrika*, Kolkata, on 22nd September, 2018. https://www.anandabazar.com/district/bardhaman/sad-state-of-leprosy-colony-at-jamuria-1.868471.

sector'.[24] In addition to that, there is no momentous increase of budget allocation to the NLEP program which is placed under the National Disease Control Program (NDCP). One of the reports of the Centre for Policy Research shows that the share of Communicable Diseases (CD) funds, out of the GOI share of the resource envelope, has marginally expanded from 5% to 7%.[25] Deepak Kumar has rightly articulated that the food and health securities are the two cardinal and primary issues that a postcolonial government should have prioritized before engaging into other spheres of development.[26] That is by no means to undermine the interrelated linkages between the social and political Diasporas, forming the fundamentals of changes in the public health policies.

The chapters of this thesis, although, intend to look into the manifold ways through which the 'scientific' narratives on leprosy and its curative measures, presented by the colonial biomedicine and indigenous medicines, have been entangled with the politics of health, body, and race since the nineteenth century; it largely restricts the course of arguments within the limits of colonialism, not taking the trajectories of *precoloniality* or *postcoloniality* much into account. In other words, the work is likely to be considered as the broken thread between pre-colonial and postcolonial medico-political understandings of the popular and statist perceptions about the 'diseased', the clinical managements, and the social response toward the 'cured'. To get a cohesive insight in this field, one needs to explore the medical peculiarities existing in the pre-colonial period. The means of institutionalizing 'science' during pre-colonial time was entirely

[24] See P. B Jayakumar, "Health care allocation in Budget 2020, 5.7% lower than last budget," *Business Today*, New Delhi, published on 1st February, 2020. https://www.businesstoday.in/union-budget-2020/decoding-the-budget/healthcare-allocation-budget-2020-5-7-percent-lower-last-budget/story/395265.html.

[25] See *the National Health Mission (NHM) 2020-21, Budget Briefs, vol.12, Issue 6, the Report of Centre for Policy Research.*

[26] Deepak Kumar said this in one of the national webinars, titled '*Epidemics and Society: the Present and the Past*', organized by Department of History (Hindi Shift), Banwarilal Bhalotia College, Asansol, which was held on 24th June, 2020.

irreconcilable with the colonial systems of 'rationalizing' knowledge. For example, '*ayurveda*' perceived the nature of 'bodies' by introspecting their '*tridasa*', treating the 'affected' people from within; whereas, the western biomedicine preferred to see the infected bodies as the objects to be diagnosed from outside. The outside/inside dichotomy or continuum, which had shaped the nineteenth century medical encounters in India, is a troubled area to the scholars especially those researching on colonial medicine. This work has paid a little attention to that pre-colonial trail of medicine while referring and analyzing the socio-cultural significance of the diverse treatments on leprosy which appeared in the vernacular health periodicals. Even in this scope of discussion, emphasis has been given more on '*ayurvedic*' and allopathic treatments rather than the homoeopathic and '*unani/hakimi*'. Perhaps, the dearth of materials in the nineteenth and twentieth century homoeopathic and '*unani*' cures of leprosy in India make the researchers not only to shift their points of departure, but also to seek the alternative ways to review the other curative traditional diagnoses in the indigenous medicines. It does not however imply that there was no such cure in the field of homoeopathy or '*unani*'. There should have been considerable focus on how the homoeopathic and '*unani/hakimi*' medicine in the Raj dealt with '*juzam*' or leprosy.

Likewise, apart from the works and pursuits of the numerous missionary organizations on which the scholars have often accentuated in their studies, the efforts of other local bodies to eradicate the disease, especially the non-governmental associations emerging after 1919, must have been brought within the frontier of research. The *Surul Samiti*, afterward renamed as *Sriniketan Samiti* from 26th December 1923, of Visva-Bharati had carried out series of public health programs in the adjacent rural areas of Birbhum.[27] The health section had a well-equipped dispensary and a

[27] See the *Annual Reports of the Surul Samiti*, preserved in the Archive of Visva-Bharati.

clinical laboratory including family and child welfare and leprosy units.[28] There might be other *samitis* (organization) as well in Bengal that too played an important role in eliminating leprosy in the most affected areas during the post-1919 era. The contentions, developing around the management and mechanisms of the leprosy colonies, are duly addressed in this work, although, the factors that led to the foundations of a large number of colonies in Bengal prior to independence are not properly contextualized. The Gouripur and Salbani sites are the exceptions offering fewer details in relation to the politico-cultural model of leprosy colonies. Apart from the records of district gazetteers, the district libraries, possessing a good deal of resources on local history, would be worth of retrieving the foundational accounts about the leprosy colonies. It is for sure that one would get a sort of uniform narrative regarding the establishment of the colonies out of these little histories, but, the cultural eccentricity or heterogeneity of each colony should not be failed to spot by the scholars while making a homogeneous narrative about leprosy colonies. This is true in case of reviewing the leprosy asylums; especially, the spatial configuration of the asylums, repairing of the buildings and wards, and the amount of donations for erecting new quarters or church would provide a fascinating cultural and religious leaning to the history of medicine.[29] Besides, the scholars in their works have mentioned the agonies of the victims, suffering from the Partition of India. Avirup Sinha has written an article on the refugee influx and the health problems amongst the displaced persons in Calcutta and its neighborhood from 1947-1952, in which, he has put forward few observations on how the health issues of the refugees had triggered the growth of a substitute forum of protest which was not likely controlled

[28] Usha Mukherjee, "Sriniketan Experiment in Rural Reconstruction," *Economic Weekly* 4 (October, 1952): 1107-1109.

[29] Jo Robertson has done extensive work on these issues which would be interesting to be researched in the context of Bengal.

by the Congress, dominating the contemporary political sphere of West Bengal.[30] On the other hand, Swati Sengupta Chatterjee has attempted to explore the sanitary and health conditions at the 'old' refugee camps during 1950s. She is of opinion that the East Pakistan refugees, arrived during 1946-1958, were seen as 'old' by the administration in contrast to the 'new' arrival of 1964-1971. Therefore, the GoWB did take the responsibility of the rehabilitation of the former refugees, whereas, the 'new' refugees were given only the conditional facilities.[31] The conditions of the leprosy sufferers in the health camps of Bengal since 1947, although, are not much undertaken religiously in the postcolonial studies of medical history. These are few ideas that have not been passably taken up in this work; however, the existing chasms can be filled with more archival studies later on.

The most erroneous concept often flickering around the alleys and lanes in medical history of twentieth century is the discontinuity or the rapture between the colonial and postcolonial settings. The nationalist historiography has intended to show the sudden shifts in the approaches of the government concerning the public health immediately after the independence. In fact, the FYPs and governmental health programs, designed during 1950s to 1970s, had the immense potentialities to revolutionize and reinvigorate the public health systems in India. The problem remained in the British world system which was still operating in the former colonies of South-East Asia and parts of Africa. Scholars, like John Darwin, have argued that the power of the British Empire, which was based on intricate web of political ecology of the settler empire of 'white dominions', the commercial enterprise of metropole, and the sub-empire India with its markets, human resource, and military strength, had been first destabilized then severely

[30] Avirup Sinha, "Refugee Influx, their Health and Hygiene related problems and its impact: A Case of Displaced Persons in Calcutta and its Neighbourhood (1947-1952)," *Proceedings of the Indian History Congress* 76 (2015): 822-29. Accessed June 29, 2020. www.jstor.org/stable/44156650.

[31] Swati Sengupta Chatterjee, "Sanitation and Health at West Bengal Refugee Camps in the 1950s," *Vidysagar University Journal of History* 3 (2014-15): 82-94.

damaged by the new post-Second World War global, financial, and geostrategic turmoil.[32] The British world system, though eroding, had habitual concerns about the challenges that Asia's nationalist leaders were facing. The postcolonial Indian government was busy to brush off the 'anti-colonial' feelings and recognize the reliance upon the western technologies and aids for transforming the depleted economy of the newly independent state into 'developing economy'.[33] Darwin has pointed out, while discarding the theory of 'immediate break with the past', that how the 'decolonized' Asian states became dependent over the British imperial power till 1960s.

Another aspect, that persuades the academia to reconsider the ideational character of Indian nationhood, is the 'scientific temper' of postcolonial state. The nomenclature of 'nation building' had commanded over the political culture in India during the early decades of independence. With a portrayal of India as a 'needy nation' infested by unrelenting problems and failures, the post-independent state elites concurrently had configured the 'ultimate solution', i.e. the 'need for science', to make India as progressive and developing nation. This discourse of 'need', nevertheless, was not a unique marker invented in Nehruvian period; it traced its origin back in the colonial regime that conceptualized and rearranged the 'broader ideology of development' which was deeply influenced by the colonial historicism with the binary of civilization/backwardness. Therefore, the inner contradiction of 'need for scientific expertise' and 'need for scientific temper' caused contending perceptions on the relations between the state, nation, and science.[34] As expected, the public health in postcolonial India, fastened with this discourse of needs, is confounded by its compliance to state sovereignty from Nehruvian period. Thus, the British 'dominionism' and the essentialism regarding colonial *scientificity* have

[32] John Darwin, *the Empire Project: the Rise and Fall of the British World System, 1830-1970* (New York: Cambridge University Press, 2009), 1-12.
[33] Darwin, *the Empire Project*, 568.
[34] Srirupa Roy, *Beyond Belief: India and the Politics of Postcolonial Nationalism* (Durham: Duke University Press, 2007), 105-107.

generated a real dilemma in the exposition of postcolonial health policies seen in the various 'awareness programs'. These 'awareness programs' are nothing but the reflection of colonial imagination that helps the government to formulate the outline of 'development'. The postcolonial imperialism, as Ashish Nandy describes, has subverted hitherto unaddressed challenging issues by imposing the colonial framework and actualizing the 'West'.[35]

On the contrary, the figurative rationale of the 'postcolonial state' barely gets off the colonial course ensuring the repressive framework over the means of 'development' since 1835. The recent scholarship has tried to deal with the '*coloniality*' embedded in not only the political ideology of the post-independent India but also in the everyday practices of individuals. That turns the discussion into something crucial, reviewing the twentieth century optimism of postcolonial thoughts in the public health policies after decolonization. The question is how far it is 'post' in the 'postcolonial' health in India if there is no significant departure from the colonial ways of exercises. Changes in the mechanisms and approaches would not enough to reinstate the depraved health system of India unless there is a priority based development. Unfortunately, there has been always improper management even in preparing the list of precedence. For example, while subduing small pox in India, the post-independent state had invested its resources less to the elimination of other communicable diseases, if not as deadly as small pox.[36] Programs taken by NLCP in first three decades were comparatively dysfunctional till the appearance of MDT in 1980s, though, that must not be the reason for not popularizing the anti-leprosy

[35] Ashis Nandy, *Time Warps: the Insistent Politics of Silent and Evasive Pasts in Indian Politics and Religion* (New Brunswick: Rutgers University Press, 2002), 61; Mary- Jo Del Vecchio Good, Sandra Teresa Hyde, Sarah Pinto, and Byron J. Good et. al., *Postcolonial Disorders* (Berkeley: University of California Press, 2008), 2.
[36] Sanjoy Bhattacharya, "WHO-led or WHO-managed? Re-assessing the Smallpox Eradication Program in India, 1960-1980," in *Medicine at the Border: Disease, Globalization and Security, 1850 to the Present*, ed. Alison Bashford (New York: Palgrave Macmillan, 2007), 60-73.

campaigns amongst the people in the previous years.[37] The policy orientations indicate the relative disdain to the minor health issues that produce lower mortality and minimal health risk [although infant mortality rate in India is still alarming, i.e. 32 per 1,000]. Despite having low-per capita public spending, India has succeeded to enhance the population health as recent evidence suggests; at the same time, the health departments of India are also celebrated for presenting statistical objectives which are either simply attained or sooner attainable. The word 'elimination', which means prevalence level less than one in 10,000 populations, has been used in the program manifestos in place of 'eradication' or zero new cases. In the National Health Policy (NHP) of 2017, a goal for achieving and retaining 'elimination' status of leprosy by 2018, then further pushed to 2019, had been included; the Annual Health Profile of India (2018) had stated that leprosy is almost 'eliminated'; the fact is that the 'leprosy elimination' was achieved more than a decade ago. There is another side of the story that would perhaps be more serious obstacle in the leprosy detection. In the (2010) editorial of the *Journal of Preventive and Social Medicine*, C. P Mishra and M. K Gupta have surveyed that the doctors are usually hesitant to work in the government's anti-leprosy programs, which are considered as 'punishment posting', due to the risk of being stigmatized by their own peers. In spite of investing substantial sum to the leprosy research, which is the largest amount in contrast to the United States according to the

[37] "Leprosy is preventable. It is curable. Early detection and treatment can avert deformity. No longer need patients lead a twilight existence on the fringes of society. However, prejudice and ignorance die hard. Because of the stigma which continues to be attached to leprosy, patients and their families are reluctant to have a check up or even admit to the disease until very, perhaps even too, late. This is our single most difficult impediment."
Indira Gandhi, the former Prime Minister of India, 20th February, 1984

"As a country, we have to leave no stone unturned to not just reach the last mile but also to work together to eliminate the social stigma at edge with this disease. Although, we have achieved our target, but at the national level, we have a long, hardest way to go to ensure that these teachable diseases are completely eliminated our country."
Narendra Modi, the Prime Minister of India, 30th January, 2017

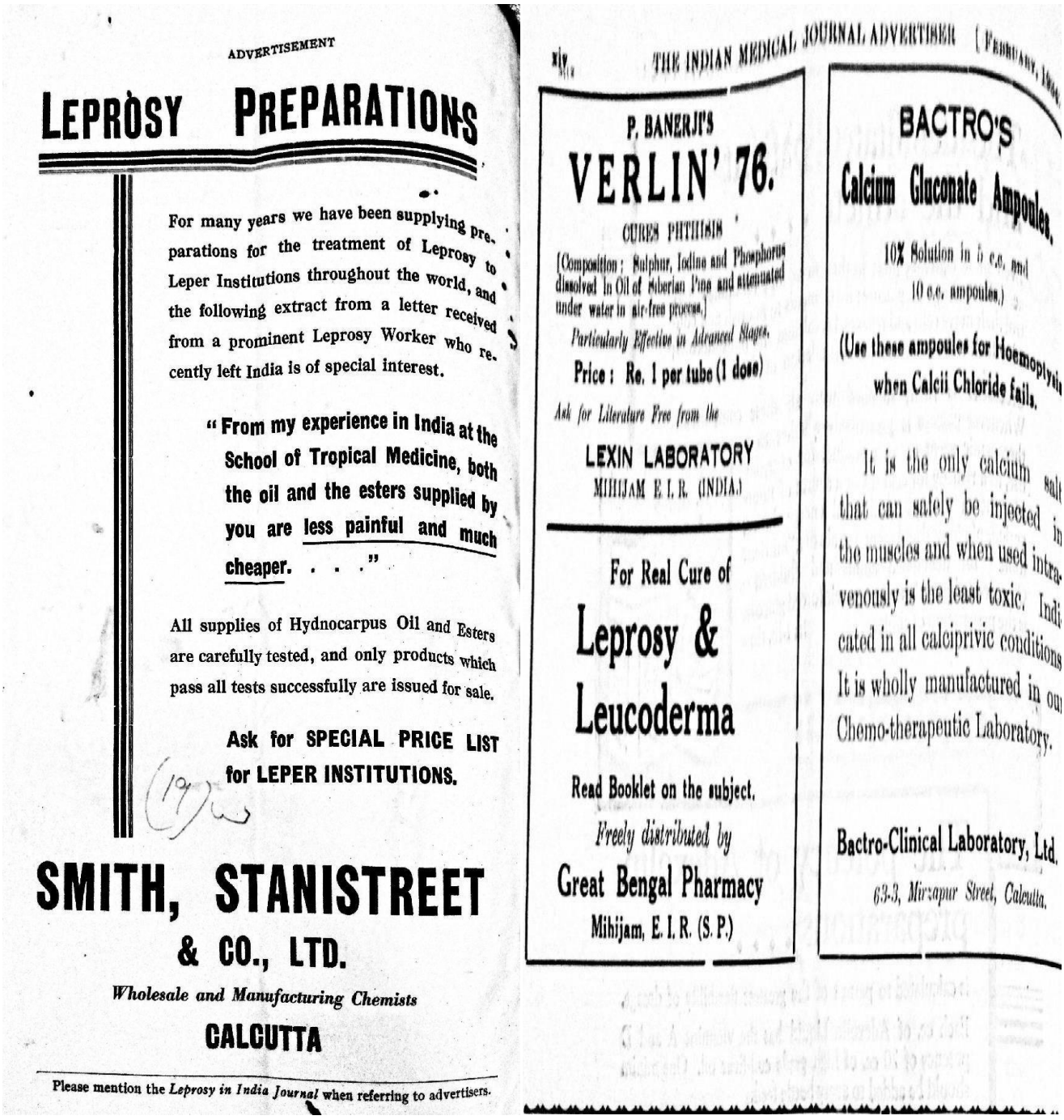
It is however most incomprehensible chore to find out any further explanation about the inability of the Indian governments, under the leadership of Honorable Prime Minister Indira Gandhi to Narendra Modi, to get rid of the 'prejudice' or 'stigma' associated with the disease.

available data of 2017, the GOI was jostling with several exceptional problems such as low detection rate of cases, high level of disease concentration in the marginalized population, and inconsistent implementation of the LCDC.[38]

The denial of facts leads the postcolonial health to nowhere, but fortunately the digitization, declassification of the personal correspondences, and the archival materials have enabled us to access some of the rarest documents and reports on the health policies of post-independent governments which definitely unwrap the new vistas of understanding in the sociology of public health. It is really problematic to perceive the postcolonial health as complete departure from or mere continuity of the colonialism, rather, the scholars should tease out the dynamisms of public health which are often hidden within the crowd of 'significant' records. Leprosy, in this case, has literally bridged the fissures between the great and little 'histories' of disease. Despite being a less threatening trouble to the public health system, the disease was/ is supposed to be an uncomfortable glitch both for the British Raj and the post-independent government. It raises series of concerns, spanning from 'disciplining the diseased individual' to the 'multitudinous cures', that have intrigued the scholars to delve into the mind and body of the leprosy sufferers considering the political and social responses. Therefore, the colonial and (post)colonial understandings of leprosy have been undoubtedly one of those enthralling affairs which require more studies in future so that the miseries of the sufferers could be reduced to a great extent.

[38] See Oommen C. Kurian, *Leprosy and Inequities in India's Healthcare: Beyond the Persistent Rhetoric of 'Elimination'* (New Delhi: Observer Research Foundation, 2019), 1-18.

Image (1): the Advertisement of Leprosy preparations, Medicines and Disinfectant for Oral Infectious Diseases, published in the Indian Medical Journal, April, 1936 (Courtesy: the National Library, Kolkata)



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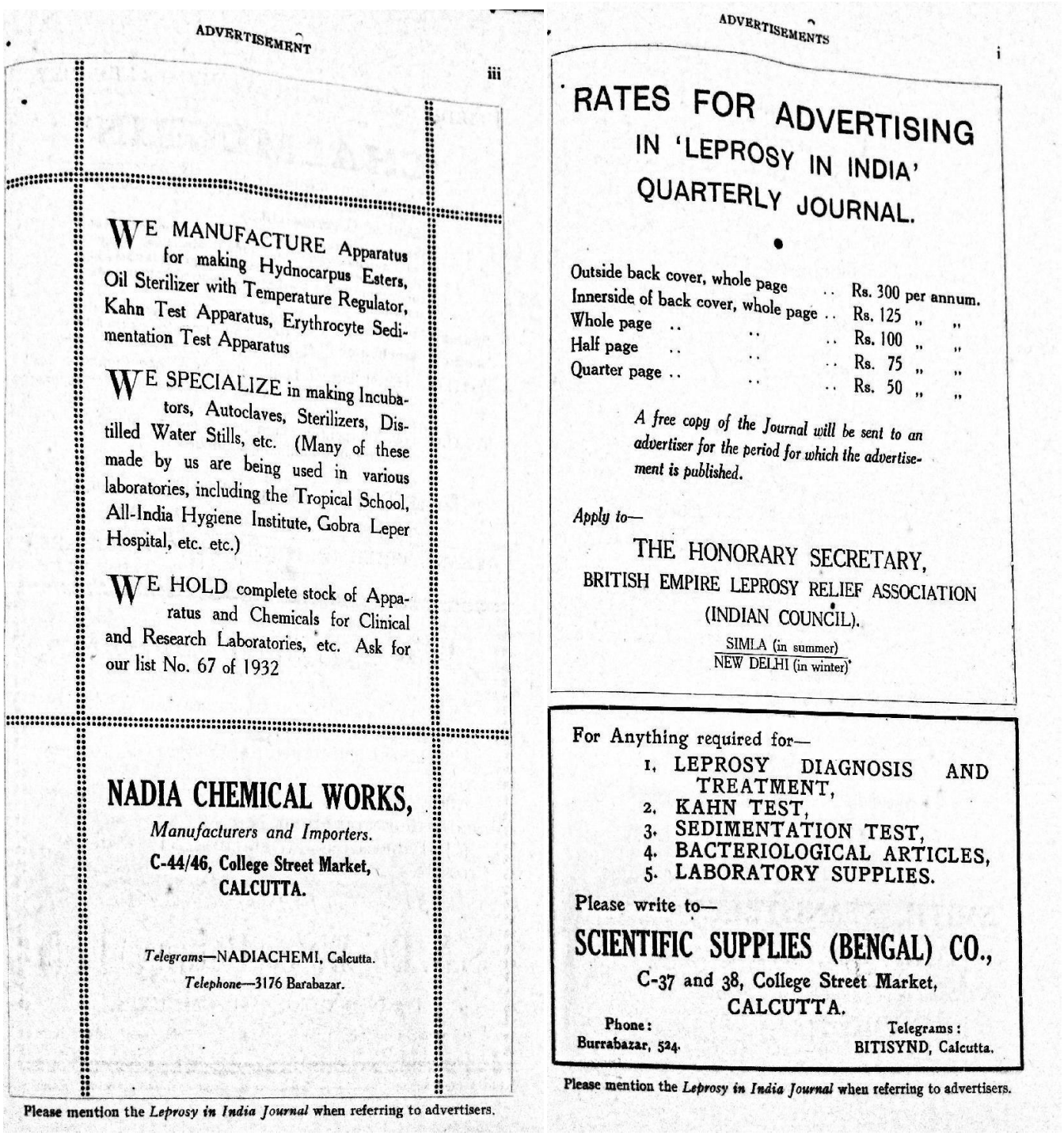

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Image (3): the Advertisements by Nadia Chemical Works, BELRA (Indian Council), and Scientific Supplies (Bengal) Co., published in (October, 1933) (Courtesy: AIIHPH)

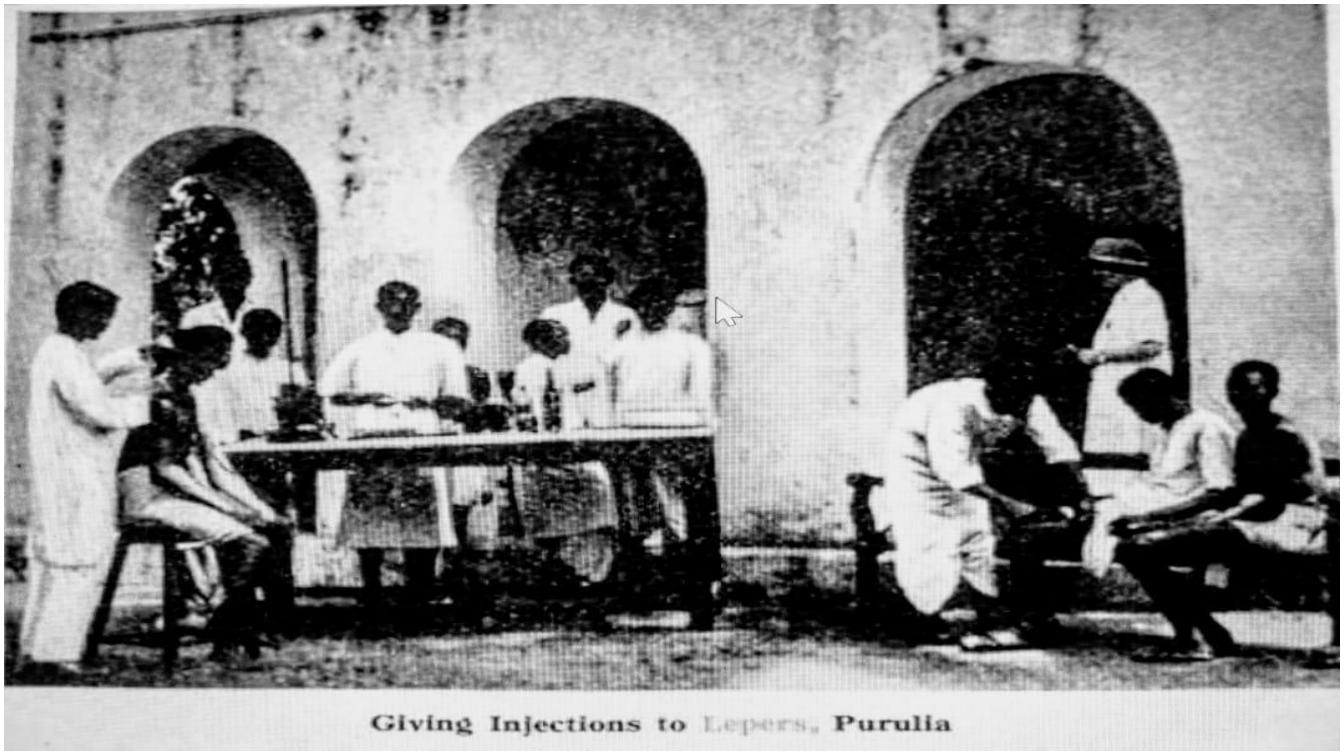

Image (4): An Outdoor Clinical Treatment was provided to the Leprosy Sufferers at Purulia (Courtesy: Church Missionary Society)(CMS)

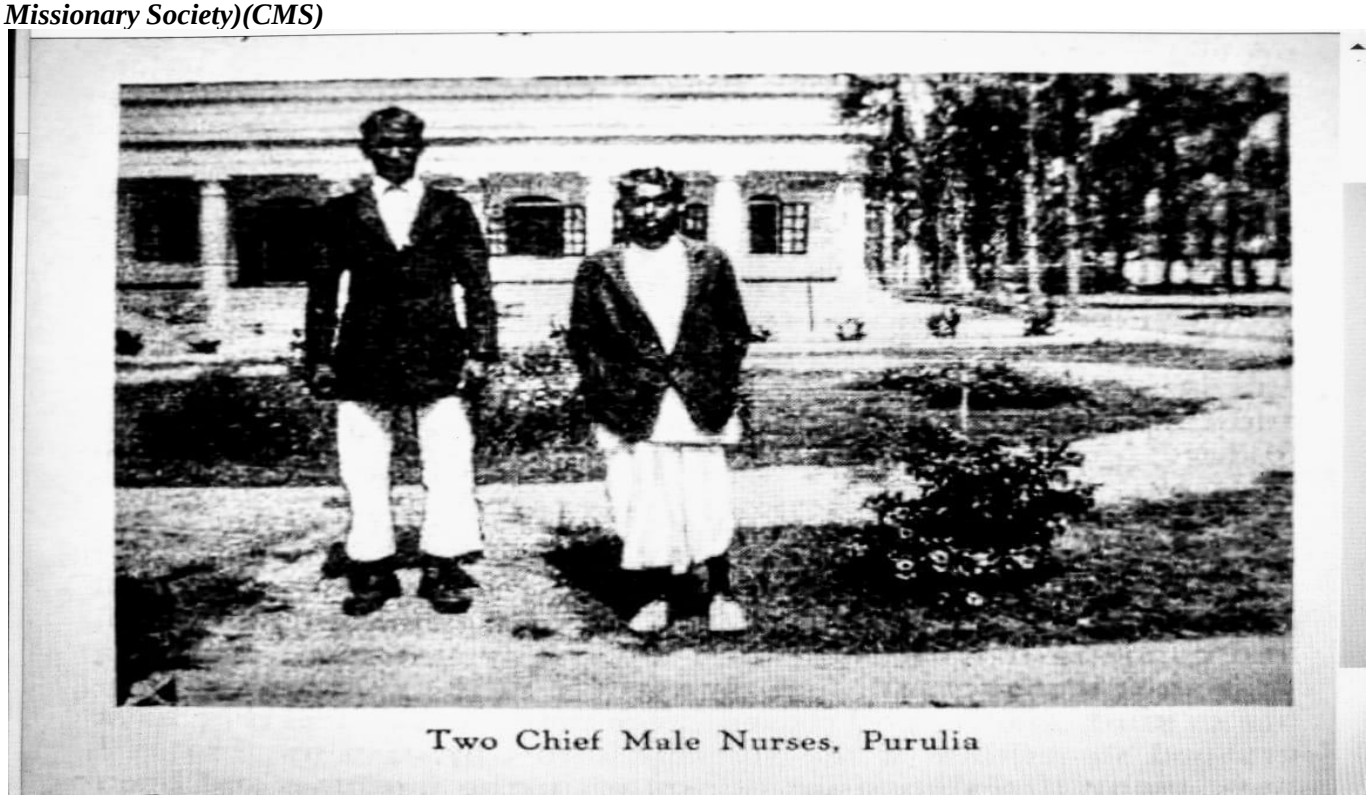

Image (5): this is a picture of two 'male' nurses in the Purulia Leper Asylum (Courtesy: CMS)

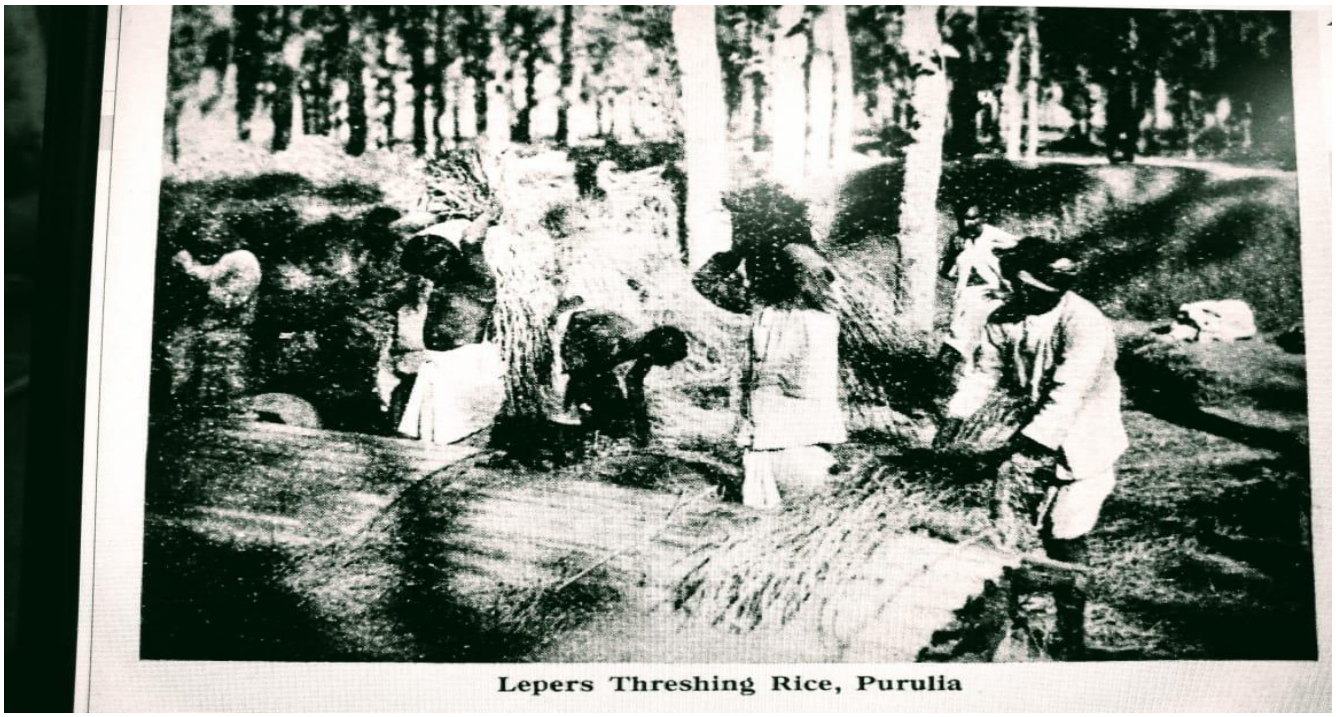

Image (6): the Manual work, such as threshing rice, was performed by the inmates of Purulia Leper Asylum (Courtesy: CMS)

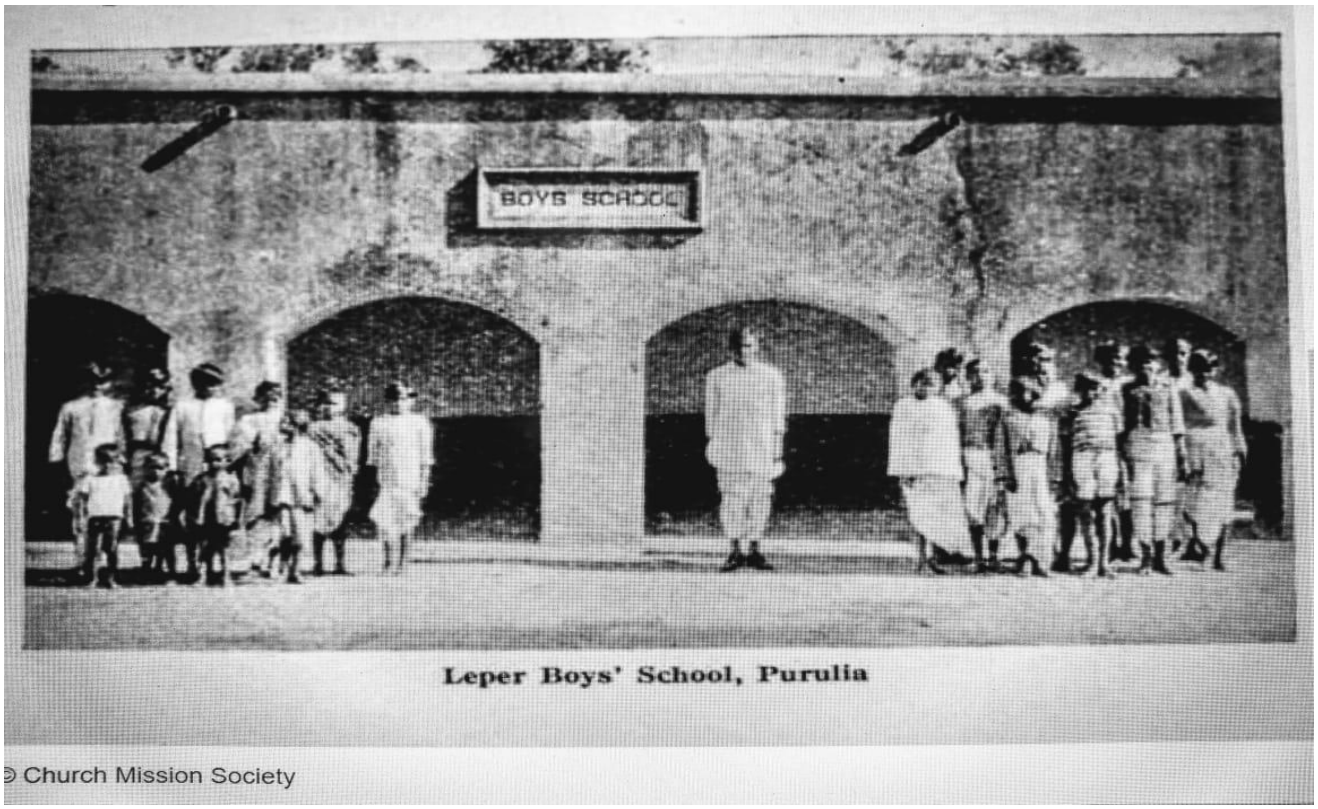

Image (7): the Leper Boys' School at Purulia (Courtesy: CMS)

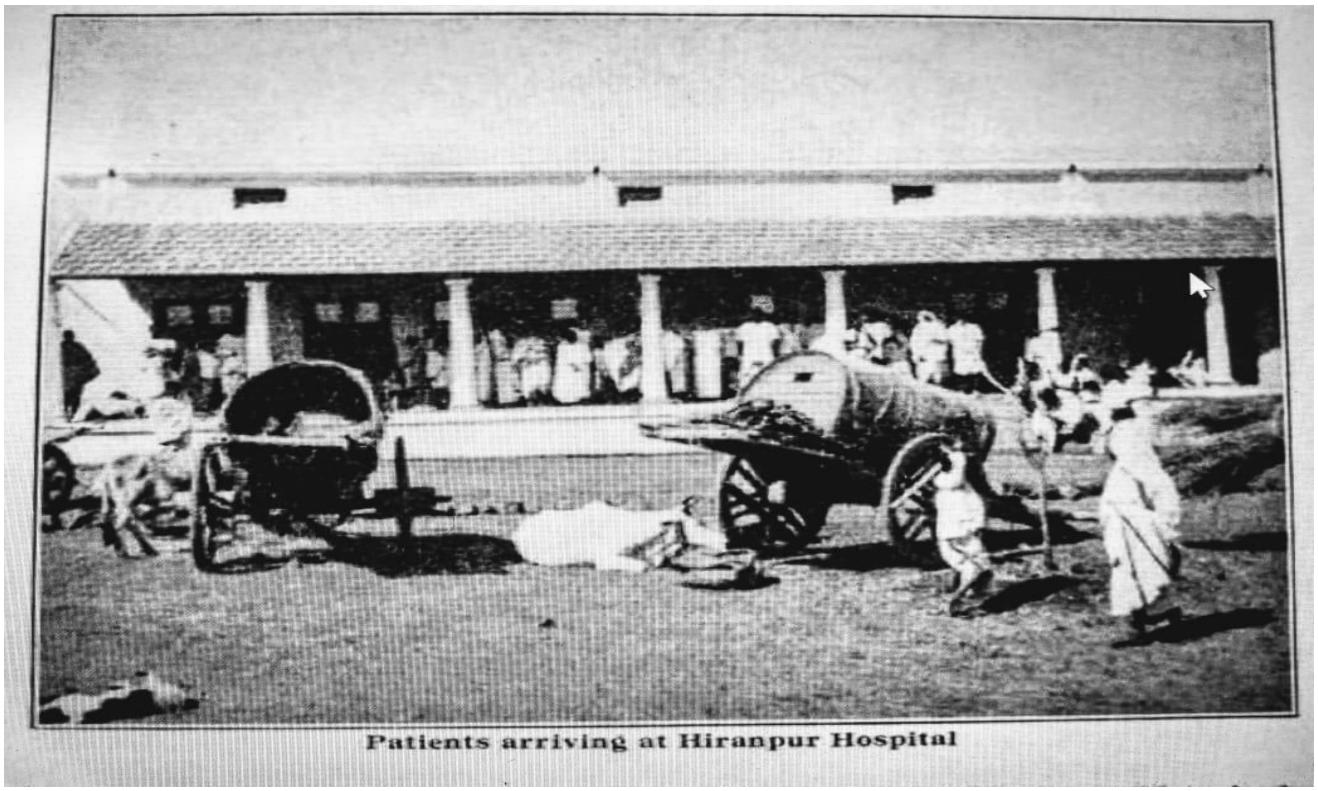

Image (8): Leprosy Patients were arriving at Hiranpur Hospital (Courtesy: CMS)

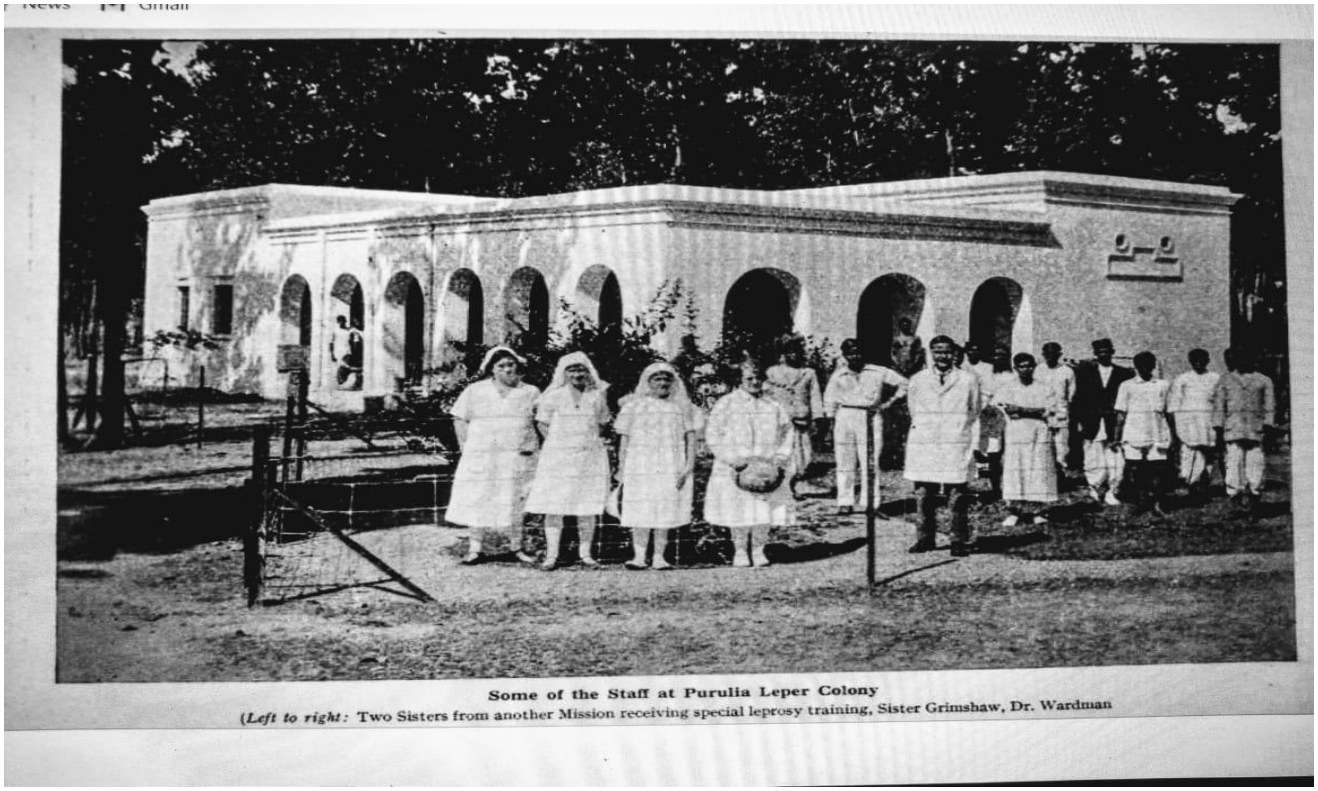

Image (9): Staffs of the Purulia Leper Asylum, (left to right) two sisters along with Sister Grimshaw and Dr. Marie Wardman and other staffs (Courtesy: CMS)

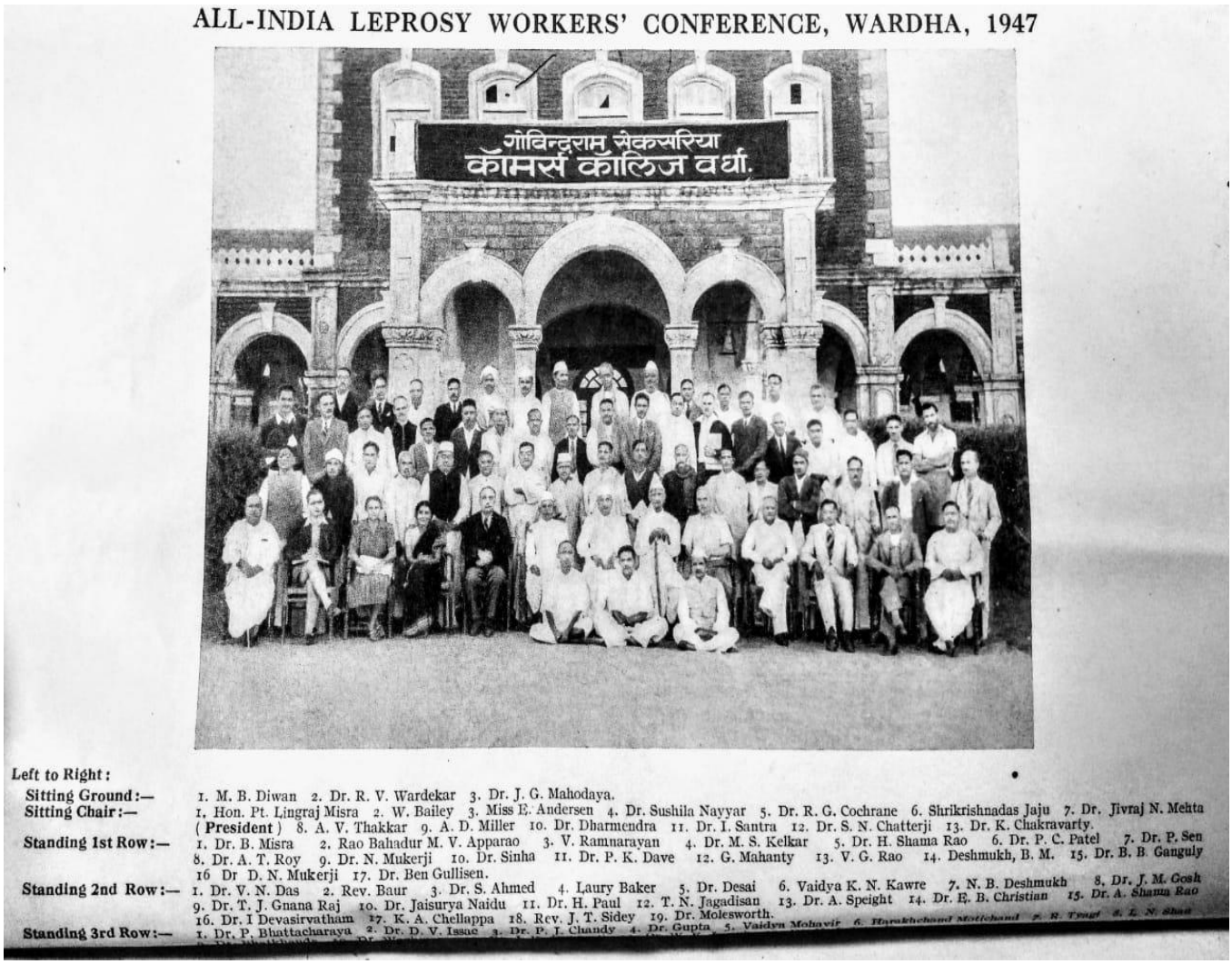

Image (10): the participators in the All India Leprosy Workers' Conference, Wardha, 1947 (Courtesy: AIIHPH)

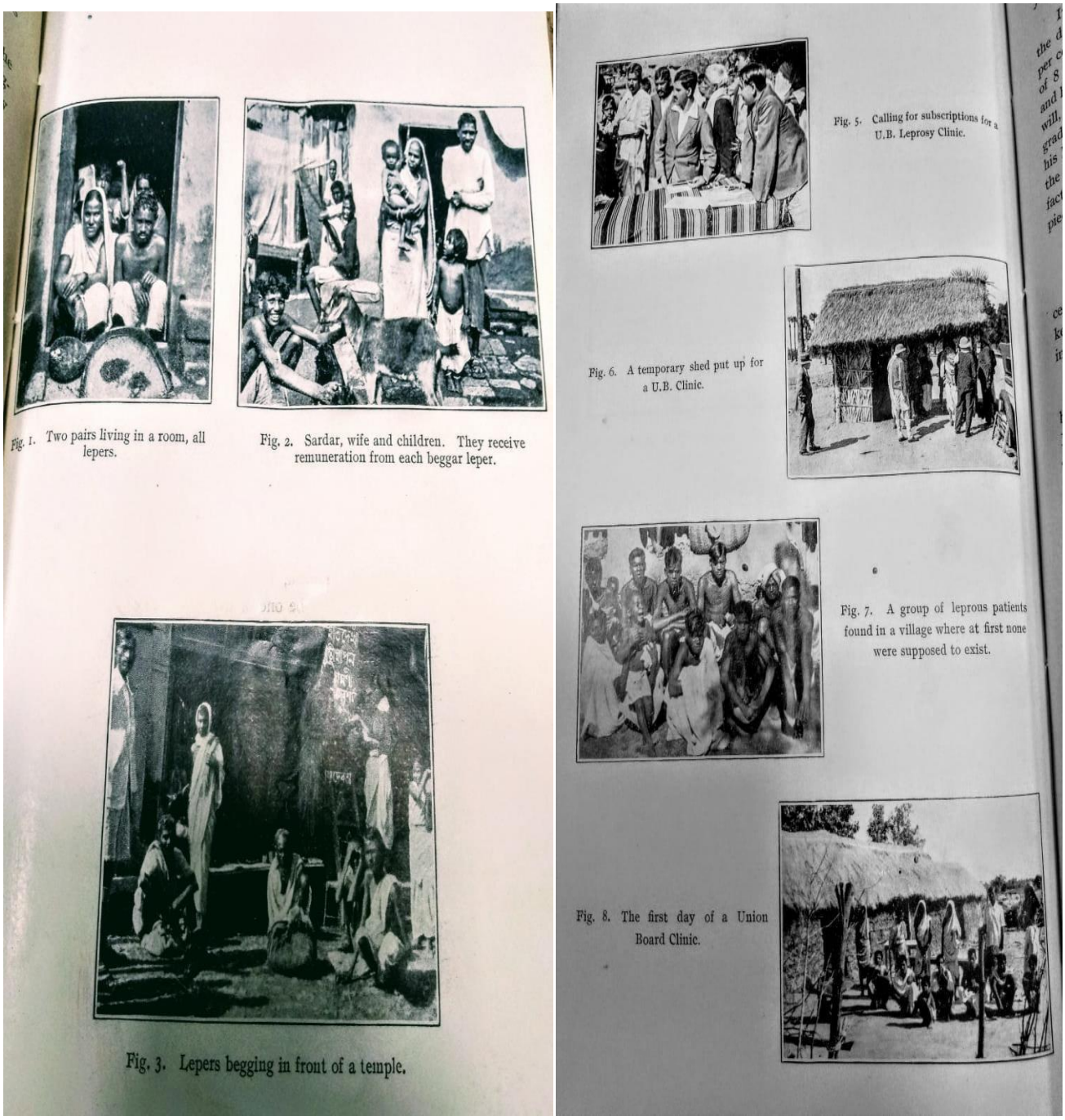

Fig. 1. Two pairs living in a room, all lepers.

Fig. 2. Sardar, wife and children. They receive remuneration from each beggar leper.

Fig. 3. Lepers begging in front of a temple.

Fig. 5. Calling for subscriptions for a U.B. Leprosy Clinic.

Fig. 6. A temporary shed put up for a U.B. Clinic.

Fig. 7. A group of leprous patients found in a village where at first none were supposed to exist.

Fig. 8. The first day of a Union Board Clinic.

Image (11): Pictures of Leper Beggars in front of a temple; the conditions of the sufferers, and calling for subscriptions for leprosy clinic, July, 1934 (Courtesy: AIIHPH)

Fig. 1. Patient isolated outside the village.

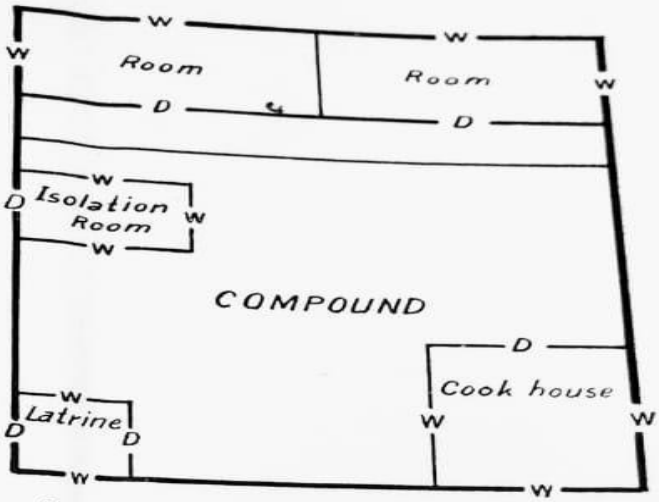

Fig. 2. Plan for isolation within the compound of a house.

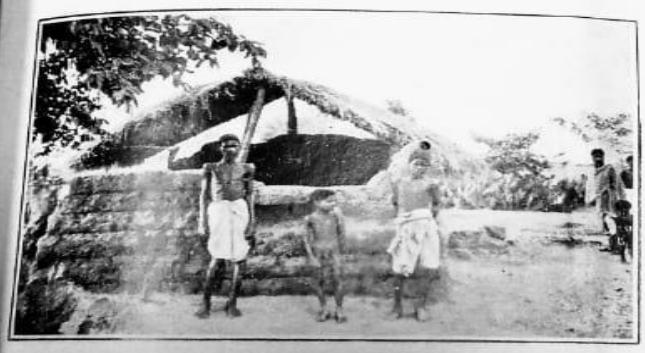

Fig. 3. Three infectious brothers isolated in a hut outside the village.

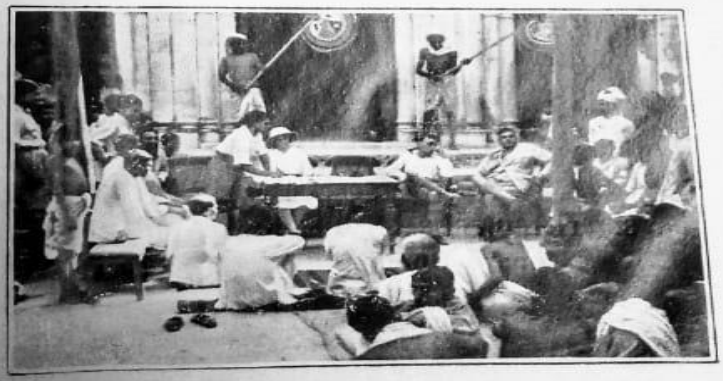

Fig. 4. Forming a Union Board Leprosy Committee.

Image (12): (From top) 1) Patient was isolated outside the village, 2)Plan for House Isolation of Leprosy Patient 3) three infectious cases were isolated outside the village, and 4) the moment of forming an Union Board Leprosy Committee, July 1934 (Courtesy: AIIHPH)

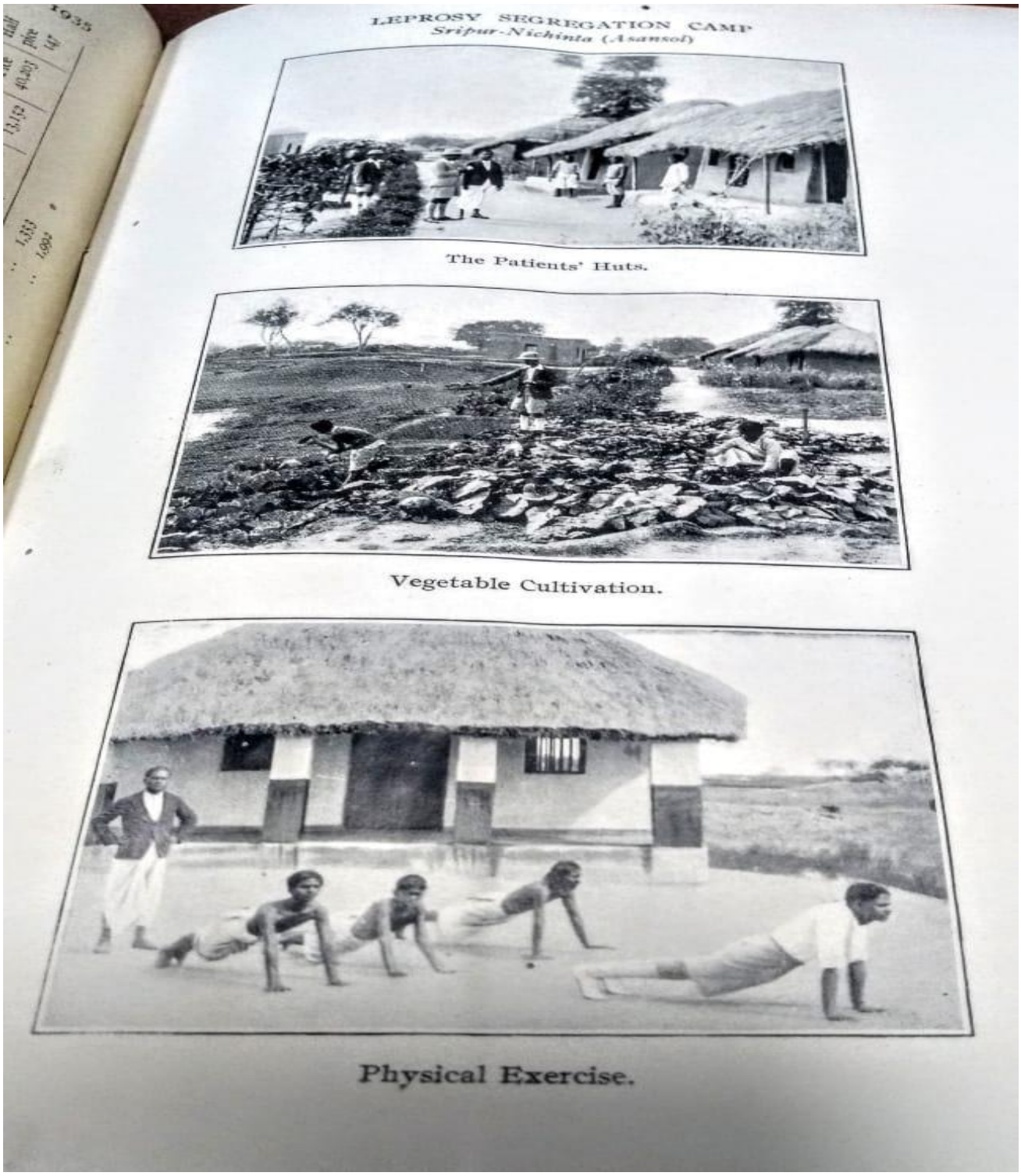

Image (13): (From top) Pictures of Leprosy Segregation Camp, Sripur-Nichinta, Asansol, 1935; cultivation and physical exercise had been always the part of the camp (Courtesy: AIIHPH)

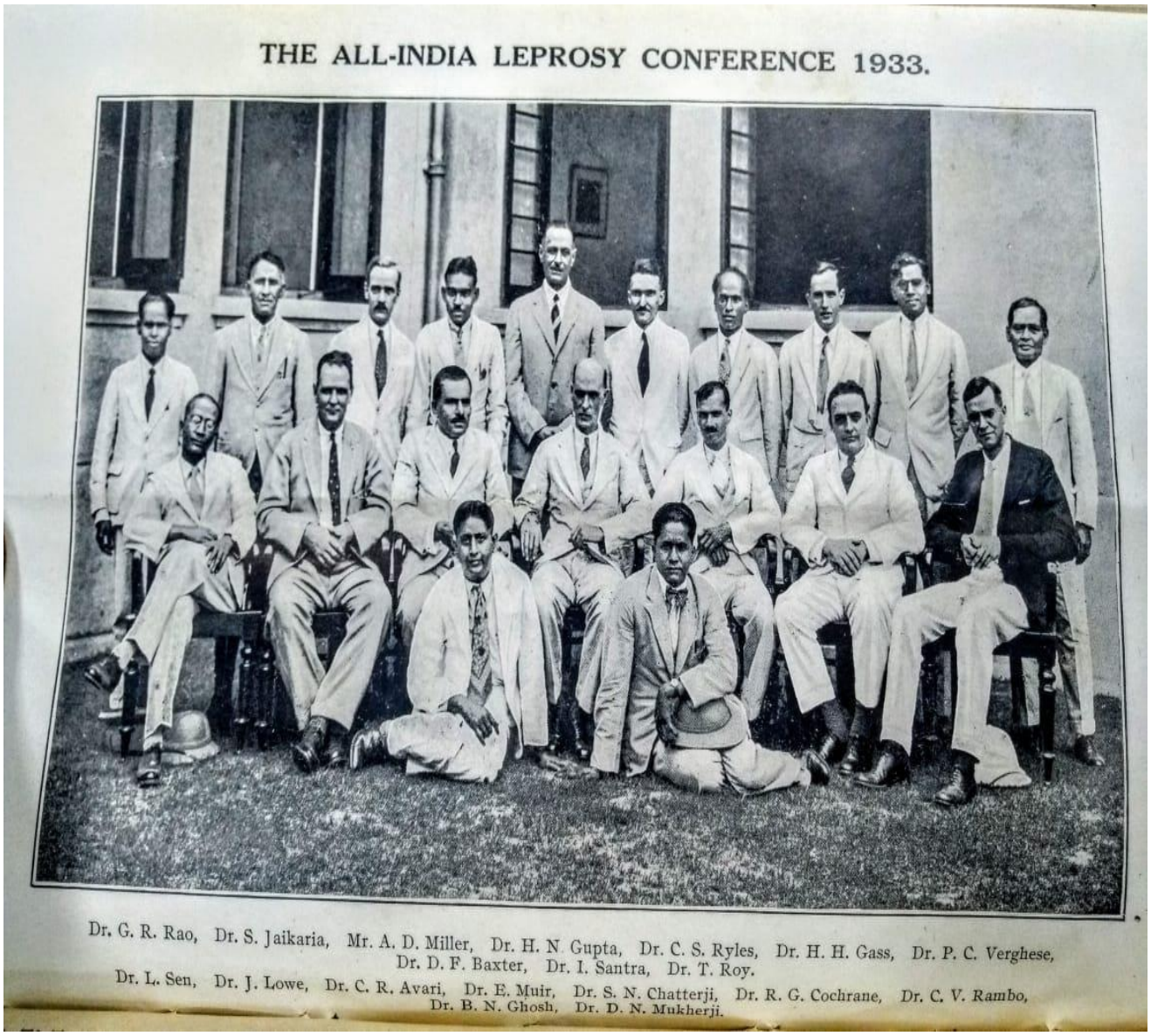

Image (14): the Participants of the All India Leprosy Conference, 1933 (Courtesy: AIIHPH)

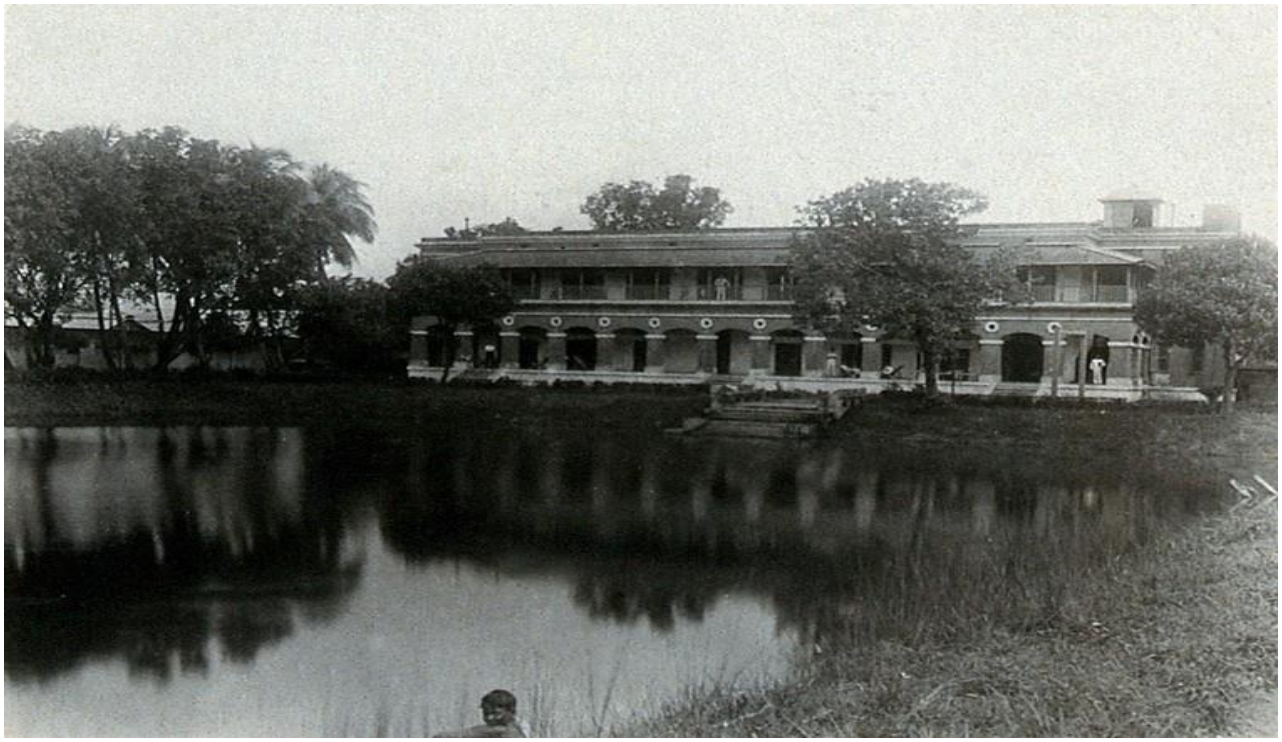

Image (15): the picture of Albert Victor Leprosy Asylum (hospital), taken between 1900 to 1920 (Courtesy: Digital Archive of the Wellcome Institute, London)

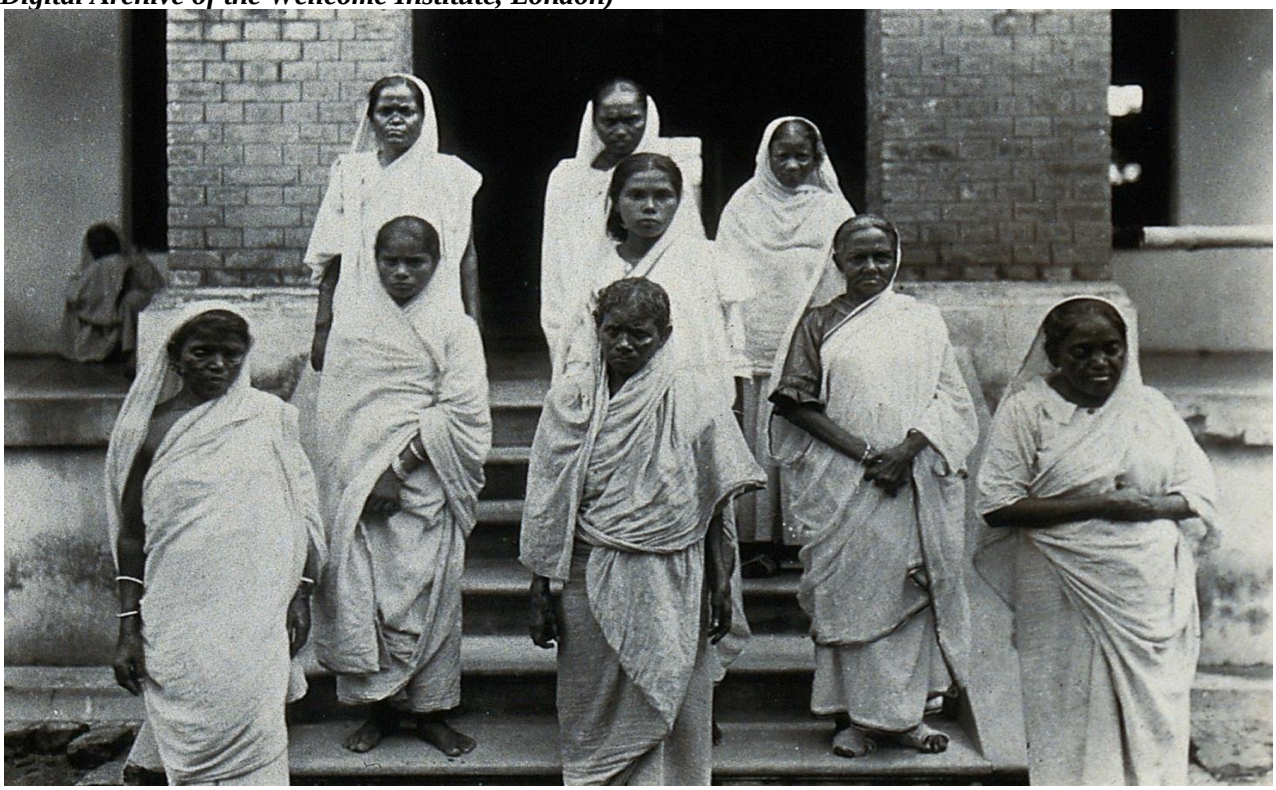

Image (16): Female leprosy patients of Albert Victor Leprosy Asylum (hospital), taken between 1900 to 1920 (Courtesy: Digital Archive of the Wellcome Institute, London)

Image (17): Male Leprosy Patients of Albert Victor Leprosy Asylum (hospital), taken between 1900 to 1920 (Courtesy: Digital Archive of the Wellcome Institute, London)

Image (18): the Front Side of Purulia Leper Asylum (Courtesy: Digital Archive of the Wellcome Institute, London)

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