Medicine and Colonial Engagements in India and Sub-Saharan Africa

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Edited by

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Dedicated to

My (late) father for the love and inspiration he gave me
during his living years,
and
My mother for her unceasing support, guidance and blessings

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Poonam Bala
Cleveland, 2018

CHAPTER ONE

INTRODUCTION: UNDERSTANDING COLONIAL ENGAGEMENTS IN THE IMPERIAL PROJECT

POONAM BALA

While a history of medicine encompassing aspects of disease and health in relation to colonial imperatives, generally, has been a major focus of scholarship in recent years, discussions and debates on race and racial purity, gender and sexuality and their changing meanings in the metropole have significantly contributed to new perspectives in understanding these changes. Medical ideologies and their relationship with race and gender constructions, as well as with hegemony and resistance in colonial regimes, now call for a detailed analysis, prompting a fresh look at these issues. The primary aim of this volume is to understand the dynamics of colonial engagements with the colonized peoples by looking at medicine, race and gender as constituting an indispensable apparatus of the imperial project in two former regions of the British Empire—India and sub-Saharan Africa—and their deployment in the colonizing process. In effect, the essays in this volume dwell upon two main arguments: firstly, race, medicine and gender were sites and fundamental structures through which and within which, colonial governance was enabled within the imperial project. Secondly, while these sites and structures played out differently in different sociocultural contexts, within the two former British possessions of India and sub-Saharan Africa, the new forms of medical knowledge and practice produced as a result reshaped colonial knowledge as well as the imperial project, thus revealing new dialectical relations between knowledge and power. In understanding these dynamics, it is important to address issues of not only how only notions of race and gender dynamics were imposed but how new forms produced as a result of resistance against cultural encounters and confrontations in the colonial context, influenced their connotations within the larger ideologies of the metropole.

Colonial engagements and colonial encounters produced colonial anxieties, largely articulated as concern for imperial hegemony and the maintenance of health and social order within the colonies. In this respect, they also rendered race, medicine and gender, which I call sites of desire, indispensable, for it was through these sites that the fear of disease and disaster underlying colonial anxieties could be allayed. Moreover, they were the focus of desire in that they addressed and fulfilled aspirations of the colonial enterprise. Thus, as Siddiqui remarks,

> if imperial rule produced anxieties about hegemony and identity, the forms these anxieties took, shaped the way power was wielded.[1]

For the most part, in India and Africa, health anxiety followed from European beliefs that health was a result of interaction among various social and environmental factors. While in the tropical colonies, this led to new modalities of investigation of the environment, it also created insecurities about "loosening the grip" on these colonies.[2] Helen Tilley's recent study[3] on the role of science in the colonization of British Africa portrays a tumultuous trajectory of the dynamics between scientific erudition and imperialism. It was not the mere knowledge acquired through research and scientific expertise in the colonies but the actual colonial experiences during episodes of disease, epidemic and popular resistance, expressed through various modalities, that evoked panic, anxiety and fear of imperial instability. This also increased imperial intervention, for it precipitated colonial feelings of vulnerability and insecurity regarding loss of imperial power.[4] Moving beyond these modalities, Robert Peckham,[5] in his recent study, highlights the relationship between panic and the changing nature of the imperial state as governed by communication and dissemination of the knowledge of disease.

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[1] Yumna Siddiqui, *Anxieties of Empire and the Fiction of Intrigue* (New York: Columbia UP, 2008), 20.

[2] James Beattie, *Empire and Environmental Anxiety: Health, Science, Art and Conservation in South Asia and Australasia, 1800–1920* (London: Palgrave Macmillan, 2011), 45.

[3] Helen Tilley, *Africa as a Living Laboratory: Empire, Development and the Problem of Scientific Knowledge, 1870-1950* (Chicago: Univ. of Chicago Press, 2011).

[4] Harald-Fischer-Tiné, ed., *Anxieties, Fear and Panic in Colonial Settings: Empire on the Verge of a Nervous Breakdown* (London: Palgrave Macmillan, 2016).

[5] Robert Peckham, ed., *Empires of Panic: Epidemics and Colonial Anxieties* (Hong Kong: Hong Kong UP, 2015).

The chapters in this volume focus on various aspects of colonial engagements in India and sub-Saharan Africa under British rule in the nineteenth and twentieth centuries for several reasons. Firstly, the undeniable and continued existence of historical connections between India and Africa, dating back several years, has left a history of cultural contacts between the two; these were apparent, for instance, in the social interactions as seen in, for instance, the dhow culture that became "the benchmark history of the early Indian Ocean," facilitating "social interaction between sailors and traders with their hosts around the rim of the Indian Ocean."[6] These transoceanic interactions also generated an immense "body of navigational knowledge through…commercial contacts and exchanges,"[7]and were, at the same time, significantly indicative of social connections and a shared and connected history of India and Africa. Tony Ballantyne and Antoinette Burton's pioneering work, *Bodies in Contact: Rethinking Colonial Encounters in World History,* an engaging piece of scholarship in colonial gender studies, also elucidates these connections through a focus on "bodies as a means of accessing the colonial encounters....," [8] which, they argue, is also one way of "reimagining world history and 'the structural events and changes' and their 'impact on micro-processes and the historical subjects who lived with and through them.'"[9] Moreover, the way Europeans saw their bodies in relation to the colonies changed with shifting power relationships in the colonies and new trends in the intellectual currents emanating from the metropole."[10] Secondly and following on the preceding point, awareness of claims to authority and indigenous medical traditions and their socio-spatial location becomes imperative in understanding the role of traditional medicine as an agency of change, resistance and accommodation, as evident in the British Empire. These connections, along with African–Indian encounters, also gave rise to a new "African" or "indigenous" knowledge, which could be seen "as an amalgam of many cultural and political influences" where

[6] For details see, Abdul Sheriff, *Dhow Cultures of the Indian Ocean: Cosmopolitanism, Commerce and Islam* (London: Hurst & Co, 2010).

[7] Poonam Bala, "Review of Dhow Cultures of the Indian Ocean: Cosmopolitanism, Commerce and Islam by Abdul Sheriff," *African Historical Review* 44 no. 1 (2012): 138–42.

[8] Tony Ballantyne and Antoinette Burton, eds., *Bodies in Contact: Rethinking Colonial Encounters in World History,* (Durham: Duke UP, 2006), 4.

[9] Ballantyne and Burton, *Bodies in Contact.*

[10] Mark Harrison, "The Tender Frame of Man: Disease, Climate and Racial Difference in India and the West Indies, 1760–1860," *Bulletin of the History of Medicine* 70, no. 1 (1996): 68–93.

"Indians not only adopted the ailments of their African counterparts but became practitioners and purveyors of African medicine itself."[11] The relation between indigenous medicine, knowledge and power can be gauged with absolute clarity in Megan Vaughan's discussion on colonial East and Central Africa, where she highlights the role played by "medicine and its associated disciplines in constructing 'the African' as an object of knowledge, [and by] the elaborated classification systems and practices which have to be seen as intrinsic to the operation of colonial power."[12] More significantly, Russel Viljoen's fascinating work on the Khoikhoi society amply demonstrates the extent to which indigenous medicine and medical practice were embedded in that society prior to its colonization.[13] The significance of indigenous medicine became more revealed in the course of the "shifting power relations between indigenous healers and foreign scientists [not only] in Africa but across the world."[14] Abena Dove Osseo-Asare, in her recent study, *Bitter Roots: The Search for Healing Plants in Africa*, provides a highly illuminating account of the changing trajectory of drug discovery "in taking traditional medicines to the laboratory," which "created a new scientific identity in modern African settings."[15] On a slightly different note, Warwick Anderson's case study of the Philippine experience[16] unravels new perspectives of the colonial process by viewing colonial medicine "as linking metropole with colony through interconnecting practices, people, technologies and ideas. This movement of ideas and people has profitably allowed for a balanced appreciation of the 'experience of empire' in a far too neglected part of the

[11] Karen Flint, *Healing Traditions: African Medicine, Cultural Exchange and Competition in South Africa, 1820–1948* (Ohio: Ohio UP, 2008), xi.

[12] Megan Vaughan, *Curing Their Ills: Colonial Power and African Illness* (Cambridge: Cambridge UP, 1991).

[13] Russel Viljoen's study of the Khoikhoi in South Africa is one of the most comprehensive and informative biographies of a Khoikhoi man living under Dutch colonial rule, illuminating the lives of the Khoikhoi peoples whose cultures were destroyed by Dutch colonizers. For details on the status of indigenous medicine in South Africa, see Russel Viljoen, *Jan Paerl, a Khoikhoi in Cape Colonial Society, 1761–1851* (Leiden, Boston: Brill, 2006); and Russel Viljoen, "Disease and Society: Cape Town, Its People and the Outbreak of the Smallpox Epidemics of 1713, 1755 and 1767," *Kleio* 27 (1995): 22–45.

[14] Abena Dove Osseo-Asare, *Bitter Roots: The Search for Healing Plants in Africa* (Chicago: Univ. of Chicago Press, 2014), 3.

[15] Osseo-Asare, *Bitter Roots*, 6.

[16] Warwick Anderson, *Colonial Pathologies: American Tropical Medicine, Race and Hygiene in the Philippines* (Durham and London: Duke UP, 2006).

world."[17]

Although medicine in the British colonies has drawn considerable attention from scholars, there is a need to understand the dynamics between British imperial identity and knowledge, both of which were defined and shaped by the colonies, their practices and their knowledge. For instance, with regard to understanding gender in colonial empires, it has been suggested that

> the British medical women's quest to carve out a professional sphere in the colonies, not only shaped the direction that medical education for women in Britain would take but also led female medical reformers to construct their goals as different from and in some ways superior to, traditional missionary reform as carried out by women.[18]

While these studies make significant contributions to a better understanding of British Africa and India, they offer limited knowledge of the connecting dynamics of colonial power in the two. The present volume bridges this gap to build new perspectives on the engagements of imperial ideologies within the two colonies and on the linkages drawn upon various colonial expressions of medicine, race, gender and disease.

In her seminal work, *Carnal Knowledge and Imperial Power*, Ann Laura Stoler provides a detailed account of the complexity of the issues underlying colonial cultures and politics. Illustrating these in the context of race, gender and class perspectives, she argues that "colonial cultures were never direct translations of European society planted in the colonies but unique cultural configurations, homespun creations in which European food, dress, housing and morality were given new political meaning in specific colonial social orders."[19] While the newly created colonial categories were essential for imperial governance, they also led to "racialized politics of classification."[20] Equally significant in understanding

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[17] More details can be obtained from a review by Raquel A.G. Reyes, "Colonial Pathologies: American Tropical Medicine, Race and Hygiene in the Philippines," *Medical History* 52, no. 3 (July 2007): 424–26.

[18] Antoinette Burton, "Contesting the Zenana: The Mission to Make 'Lady Doctors for India,' 1874–1885," *)* 3 (July 1996): 368–97, 371. See also Janaki Nair's essay, "Uncovering the Zenana: Visions of Indian Womanhood in Englishwomen's Writings, 1813-1940," *Journal of Women's History* 2 (Spring 1990): 8–34, in which she discusses the different ways in which the zenana was constructed by English women writers as an "ideological and vocational space."

[19] For details, see Ann Laura Stoler, *Carnal Knowledge and Imperial Power: Race and the Intimate in Colonial Rule* (California: Univ. of California Press, 2002), 24.

[20] Ibid., 7.

the relevance of these encounters and creations is their role in explaining the "growing empires' demand to become morally conscious" so that they would uphold their "racial, national and religious superiority,"[21] while still maintaining their centrality in imperial politics. In this vein, as Durba Ghosh, in her pioneering work, *Sex and the Family in Colonial India*, remarks, "fundamental elements of colonial racial hierarchies were put in place much earlier as the bodies of native women became the site upon which the probity of colonial rule and the boundaries of Britishness were established."[22]

While race and racial descriptions were important markers of colonial attitudes, concomitant changes took place with the emergence and dissemination of new policies and developments in the nineteenth and twentieth centuries. One such development was seen in the rise of the printing press in the colonies which enabled the development of national literatures. Moreover, "in Asian and African contexts, standard print cultures were powerful forces in forging national identities among the colonial intelligentsia, following from the European model"[23] while also focusing on "high" literature, perpetuating "images of a Western-educated indigenous intelligentsia effecting modernization and reform."[24] The rise of the printing press linked the "colonial society in India and Victorian Society in England" by producing a "shared national (imperial) identity."[25] At the same time, "in the active intellectual climate that had been stirred up following the close encounter with the West, Bengali became the medium of self-expression of a conscious and articulate urban literati. The canons of polite speech and literature that came to dictate the cultural life of the educated classes in Bengal led to an intense drive to cleanse and standardize an untidy colloquial and to stamp it with "authenticity" and

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[21] Durba Ghosh, *Sex and the Family in Colonial India: The Making of Empire* (Cambridge: Cambridge UP, 2006), 1.

[22] Ghosh, *Sex and the Family*, quoted in Tony Ballantyne, "The Changing Shape of the Modern British Empire and its Historiography," *The Historical Journal* 53, no. 2 (June 2010): 429–52.

[23] Benedict Anderson, *Imagined Communities: Reflections on the Origins and Spread of Nationalism* (London: Verso, 2006), 86, quoted in Anindita Ghosh, "An Uncertain 'Coming of the Book:' Early Print Cultures in Colonial India," *Book History* 6 no. 1 (2003): 23–55.

[24] Ghosh, "An Uncertain 'Coming of the Book.'"

[25] Benedict Anderson, *Imagined Communities*, rev. ed. (London: Verso, 1991), quoted in Denise P. Quirk "True Englishwomen and Änglo-Indian: Gender, National Identity and Feminism in the Victorian Women Periodical Press," in *Imperial Co-histories: National Identities and the British Colonial Press*, ed., Julie F. Codell (NJ: Fairleigh Dickinson UP, 2003), 167–86.

"respectability."[26] Such developments were also reflected in health and women's health, in particular, when vernacular languages helped to initiate new public discussions on sexuality and reproductive health and population politics and control that gained prominence in colonial policies.

In discussing engagements of medicine with colonial ideologies and through case studies focusing on colonial India, South Africa, Swaziland, Uganda, Zimbabwe and Kenya, *Medicine and Colonial Engagements* explores several themes. First, the ways in which gender, race and medical knowledge were conceptualized, reframed and re-defined as necessarily imperial; second, production and dissemination of specific forms of knowledge created through these engagements; third, the emergence of transnational knowledge and scientific discourses; fourth, the complex nature of colonial engagements expressed through colonial anxieties, body politics, health and self-discipline; finally, construction of racial hegemony and sexuality and new perceptions of gender.

While studying colonialism, imperial relations and their dynamics become significant as they are understood in terms of cultural encounters and knowledge encounters which included both "indigenous and colonial as well as elite and popular"[27] elements "in diverse locations of the empire."[28] In India, these cultural engagements," interwoven into indigenous epistemologies,"[29] produced a kind of "mixed" or alternative modernity."[30] The rise of the national movement was one such outcome of the colonizing process that created and re-created new ideas of scientific modernity, involving nationalists, medical practitioners and the people of India. As a cultural force, nationalism also offered distinct strategies of acquiring not only political freedom but also social, cultural and medical autonomy that would ensure and sustain an indigenous collective identity. Not surprisingly, some indigenous medical practitioners attempted to validate, for instance, Sikh solidarity by appropriating indigenous knowledge in vernacular languages.[31] Set within the framework of a nationalist agenda,

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[26] Ghosh, "An Uncertain 'Coming of the Book.'"

[27] Fa-ti Fan, *British Naturalists in Qing China: Science, Empire and Cultural Encounter* (Cambridge, MA: Harvard UP, 2004).

[28] Richard Drayton, "Knowledge and Empire," in *The Oxford History of the British Empire: The Eighteenth Century*, vol. 2, ed. P.J. Marshall (Oxford: Oxford UP, 1998), 231–53.

[29] See Tony Ballantyne, "The Rise of Colonial Knowledge," in *The British Empire: Themes and Perspectives*, ed. Sarah Stockwell (Malden, MA: Blackwell Publishing, 2008), 186.

[30] Ballantyne, "Colonial Knowledge."

[31] Kavita Sivamakrishnan discusses this in her study on indigenous medicine in

Bala examines the trajectory of Ayurveda as a significant element of the national consciousness. Equally significant was the paradigm of Hindu domesticity that Berger highlights in her chapter on the development of population politics. She sees this as part of a process where controversial information, especially that concerning sexual and reproductive health, was conveyed to women; in this process, a new order for a 'healthy nation was created in the domestic lives of women.'

The rise of print culture and its engagement with the public signified continuity in meaningful (re) negotiations of medical techniques, therapeutics and new methods of diagnosis. The indispensability of print culture can be gauged through Banerjee's chapter, which highlights the role played by the Bengal periodical, *Nara-Naree* as a vehicle for dissemination of ideas on the female body, sexuality and conjugality and their impact on gender roles and in the emergence of global sexology. In trying to unravel the complexities in understanding gender roles, the female body and sexuality and procreation imbrication across colonial regimes, the chapter shows that printed literature advocated and circulated global knowledge on these issues, at the same time addressing ideas of scientific modernity. Banerjee's discussion also focuses on the engagement of women as agents as well as subjects in the propagation of ideas on sexual science and contraceptive knowledge beyond the elite and Western framework—the private domain impacting upon the public domain. This process was furthered by the employment of the wet nurse, whose intimate relationships and bodily transactions with British babies reaffirmed her role as more of an agency on which imperial mandates depended; in her discussion on locating the wet nurse in the colonial context, Hassan provides a lucid explanation of the various perspectives involved. The wet nurse's position in a colonial household, she argues, created new ideas for the negotiation of colonial and familial relations. Other allegories of the body also formed an essential component of political ideas and impressions, especially during the time of the national movement in India when issues of power and contestation with colonial imperatives reigned supreme. In 1909, Gandhi expressed his thoughts on self- discipline in terms of "real home-rule (national self-government)," which he advocated in terms of "self-rule or self-control."[32] In this context, Prasad offers a

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colonial Punjab. For details, see her *Old Potions, New Bottles: Recasting Indigenous Medicine in Colonial Punjab (1850–1945)* (New Delhi: Orient Longman, 2005), 13. See also details in Nandini Bhattacharya, "Between the Bazaar and the Bench: Making of the Drugs Trade in Colonial India, ca. 1900–1930," *Bulletin of the History of Medicine* 90, no. 1 (Spring 2016).

[32] Anthony J. Parel, ed., *M.K. Gandhi: Hind Swaraj and other Writings*

detailed explanation of the close ties between the political and moral desires required for self-rule and self-care in the form of health and healthy living which also became indispensable to colonial dictates of "policing food consumption."

In recent years, scholars have examined the relationships between veterinary science and medicine under colonial regimes in order to understand their impact on various policies of the colonial administrators. The chapter by Musiiwa goes beyond these perspectives to look at how racial hegemony was constructed through the coming together of knowledge on stock disease and the anxiety to control East Coast fever, providing much-needed new insights into the racial "disease, medicine and empire" perspective. On a similar note, attitudes regarding gender and sexual development, as Musisi and Musisi highlight in their chapter, underwent major changes as a result of colonial public health measures. While the "enclavist" agenda of colonial policies may have been apparent, transformations in gender perceptions were as a result not ruled out. In addition, women, as "mothers of empire," as Ushehwedu discusses in his chapter, also produced "racial discrepancies" in delivering health services to the native population, producing an "unhealthy" empire.

Central to understanding imperial history in the nineteenth and twentieth centuries is recognition of the prominence attained by much of the scientific and medical enterprise. However, their engagements with the colonized populations had resulted in "the cultural framing of political ideologies."[33] Discussed in this vein, medical institutions and Western-style schools were major avenues for evangelization, humanitarianism and dissemination of Western education and culture. Christian missionaries played a significant role in facilitating colonial powers as they expanded, often acting as "go-betweens"[34] while the colonists increasingly gained control. In India, the "medical mission-cum-salvation" strategy operating through "touring clinics," as discussed by Nesamony, not only provided much-needed health benefits but also catalyzed amicable relations and prevented contestation between the missionaries and the people. Placed in this context, medicine in the colonial setting, as Roy MacLeod and Milton Lewis contend, entails "the experience of European medicine overseas, in

(Cambridge: Cambridge UP, 1997), 118.
[33] Stoler, *Carnal Knowledge*, 13.
[34] James R. Lehning, *European Colonialism since 1700* (Cambridge: Cambridge UP, 2013), 217.

colonies established by conquest, occupation and settlement."[35]

The conceptualization and production of medical knowledge were important markers in the framing of colonial policies in Africa. Olumwullah does justice to this aspect in his chapter, arguing that the production of medical knowledge was largely based on understanding the role of the African woman as central to the colonial economy; this also meant that anxieties over the fertility of the African woman were prevalent in the minds of scientists who, in the course of establishing knowledge in the area of tropical medicine and epidemiology, were also compelled to learn about the exact role of African women in society.

In understanding the dynamics of disease, health and medicine in relation to colonial engagements, thus, it is significant to note that colonial encounters and engagements with and within indigenous societies deemed race, gender and medicine as necessary sites of desire- for they provided the necessary colonial space (s) within which, and through which, colonial negotiations and conceptualization of new knowledge could be sought; the latter became the guiding force behind health and medical policies in the empire. At the same time, colonial engagements also destabilized existing social spaces within the sociocultural environment of the colonized peoples in India and Sub-Saharan Africa, often defied through nationalistic, racialized and gendered forces and policies, thereby increasing colonial vulnerabilities in an otherwise optimistic colonial enterprise.

[35] Roy MacLeod and M. Lewis, eds., preface to *Disease, Medicine and Empire: Perspectives on Western Medicine and the Experience of European Expansion* (London: Routledge, 1988), x.

CHAPTER TWO

AYURVEDA AND THE RAJ: AGENDA FOR A 'NATIONALIST PROJECT'

POONAM BALA

The study of the nationalist movement and the dynamics of medical practice(s) under colonial rule in India has led to new understandings of issues relating to identity, the emergence of modernity and medicine. While the rise of nationalist perspectives and sentiments in the second half of the nineteenth century witnessed strong links of medicine with broad cultural awareness of autonomy and self-rule alongside recognition of traditions, Ayurveda provided new visions of engagement of medicine with the prevailing political ideologies. It also represented part of a nationalist agenda, at the same time complementing biomedicine in the latter's appeal in the making of modern science and scientific ideologies. Framed in this context, the chapter will focus on the emergence of nationalism and the engagement of Ayurveda in creating and re-creating new ideas of scientific modernity under colonial imperatives while negotiating with its Western counterpart as an indispensable part of the nationalist project.

Much of the nineteenth and early twentieth centuries witnessed social and political changes in India that eventually altered the way in which India's heritage and culture were to be perceived in encounters with colonial imperatives. These encounters were reflected in attempts at according a new place to Indian medical knowledge vis-à-vis Western medicine when issues of reassessment of medical essentials came to the fore. In locating the emergence of knowledge and power within the colonizing process, Arnold remarks,

> …..the diverse array of ideological and administrative mechanisms by which an emerging system of knowledge and power extended itself into and over India's indigenous society [was] in many respects characteristic of bourgeois societies and modem states elsewhere in the world. . . . There is

> indeed a sense in which all modern medicine is engaged in a colonizing process. . . . It can be seen in the increasing professionalization of medicine and the exclusion of "folk" practitioners, in the close and often symbiotic relationship between medicine and the modern state, in the far-reaching claims made by medical science for its ability to prevent, control and even eradicate human diseases."[1]

While medicine, as a system of knowledge and power, was instrumental in enabling the colonizing process, it also served to provide legitimacy to the process by addressing the needs of the colonial administration through the expansion of modern medicine and provision of medical services; along with indigenous medicine, it became a powerful force for medico-cultural change in India, which paved the way for promoting new ideas of modernity. Thus, instead of being a "tool" of empire[2], it was an agent of medico-cultural change, which also provided a paradigm of analysis of the processes of construction of theories of disease.

The oft-quoted claims about the need to resuscitate Indian medical knowledge and practice in the optic of Western medicine call for a clearer understanding of the construction of Ayurveda as a professional body of knowledge under colonial rule. From this perspective, while a social constructionist approach[3] to understanding diseases has been controversial,[4] its significance as "the centre of medical history"[5] within the rhetorical construction of health and healing in particular social situations cannot be overlooked.[6] Moreover, the desire to relocate Indian medicine in the changing political scenario under the Raj was indicative of a "progressive" science requiring attention of a different kind—attention that would focus on proving the scientific existence hitherto unrecognized by the colonial administrators.[7] It is, thus, in (re)locating Indian medicine that various

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[1] David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-Century India* (Berkeley:Univ. of California Press, 1993), 9-10.

[2] Daniel Headrick, *The Tools of Empire: Technology and European Imperialism in the Nineteenth Century* (Oxford: Oxford UP: 1981).

[3] Ludmilla Jordanova, "The Social Construction of Medical Knowledge," *Social History of Medicine* 8 (1995):361-81, 367.

[4] For further details, see Keir Waddington, *An Introduction to the Social History of Medicine: Europe since 1500*, (Basingstoke: Palgrave Macmillan, 2011).

[5] Waddington, *An Introduction to the Social History*, p.11.

[6] David Harley, "Rhetoric and the Construction of Sickness and Healing," S*ocial History of Medicine* 12, no.3 (1999): 407-35, 432. See also Waddington, *An Introduction to the Social History*, p.11.

[7] Poonam Bala, " 'Nationalising' Medicine: The Changing Paradigm of Ayurveda in British India" in ed. Poonam Bala (ed.), 2012 and 2016, *Contesting Colonial*

issues of modernity come to the fore. But what was the impelling need to (re)locate Indian medicine? As Prakash argues, "the modernity of the Indian nation…was predicated on the science of the *ancient Hindus*," which also "became a pervasive and enduring feature of nationalist imagination."[8] The nationalist project in India gained strength in response to the consolidation of Western medical authority and intervention. In the colonial process, while ideas of race and gender were rearticulated and formed and reframed, ideas of medicine were also revisited as the latter became more professionalized over the years.

Early Years of Medical Education

Several events characterized the gradual emergence of Indian medicine as a 'nationalist project' in response to the shifting policies of the colonial administration: firstly, the trajectory of medical education and its impact on the local population and secondly, the development of colonial policies that governed medical practice in India. The Bhadralok in Bengal were the first social group to, under British rule, embrace the benefits of Western-style education and aspire to achieve what was denied to them by the economy.[9] As one of the most successful groups, with successful alliances with British colonial administrators and the wealthy, landed and educated, they were recognized as "superior in social status to the mass of their fellows," adopting Western-style educational ideals and the "literate professions and office jobs" as their main sources of livelihood.[10] In later years, it was the Western-educated Bhadralok who were at the helm of medical and cultural deliberations. It must also be noted that Bombay would become equally indispensable as a force behind the growth of the medical profession. In addition to its status as an important port and hub of communication both within and outside India, it offered a unique social structure, claiming the Palshikar Brahmins, the Pathare Prabhus, the

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Authority: Medicine and Indigenous Responses in Nineteenth- and Twentieth-Century India (Lanham: Rowman and Littlefield and New Delhi" Primus Books), 1-12, 2.

[8] Gyan Prakash, "The Modern Nation's Return in the Archaic," *Critical Inquiry*, 23, no.3 (Spring 1997), 536-56.

[9] Partha Chatterjee, *The Present History of West Bengal: Essays in Political Criticism* (Delhi: Oxford UP, 1997) 11.

[10] David Kopf, "A Bibliographic Essay on Bengal Studies in the US," in Aspects of Bengali Histoy and Society, ed. Rachel V.M.Baumer (Honolulu: Univ. of Hawaii Press,1976), 200-43, 213.

Bhandaris, the Panchkalshis, the Agris and the Kolis, as its oldest existing social groups. Of these, the Palshikar Brahmins were notable not only for their long association with the city but also for the privileges granted to them by the East India Company. They were given the right to act as priests and as medical attendants to the sick. In addition to these social groups, Parsis also constituted a fair proportion of the general community in Bombay.

Initial efforts to educate the local population were made by the missionaries who arrived in India in the early nineteenth century. The establishment in 1815 of the Hindu Boys' School in Bombay, the first school operating in accordance with the style of education in Europe, was followed by a Girls' School in 1824. Further encouragement to provide education to girls was provided by the Church Missionary Society, which opened another school in 1826 and in 1835 founded an Anglo–vernacular school in memory of Robert Cotton Money, secretary to the government in the Education Department in Bombay. Between 1829 and 1830, six schools for girls were established by Dr. John Wilson of the Scottish Missionary Society. While efforts were made by missionaries to educate the indigenous population in the English language as part of their missionary activity, education in Indian vernaculars also came to the fore. Although Mountstuart Elphinstone, the first Governor of Bombay, established the Elphinstone Native Education Institution in 1827, its quality was determined much later when Charles Morehead, member of the Bombay Medical Service and Secretary of the Board of Education (created in 1840), demanded inspection of all schools in the Bombay Presidency. Local elites, in the meantime, organized the establishment of the Bombay Native School and Book Society, which was eventually merged with the newly created Board of Education, hence taking charge of educational administration in Bombay. A redeeming feature of the education policy of the 1840 Board of Education was the supply in abundance of books in Indian vernaculars, in addition to new translations into the local languages. Local magnates and influential men in the Bombay Presidency actively supported all efforts to promote and expand education in the Presidency; needless to say, they were also the main patrons of medical education in later years.

In Bengal, the proposal to expand subordinate medical services resulted in the foundation of the Native Medical Institution (hereafter, N.M.I.) in 1822. The school was the first of its kind in India and attracted popular interest by instituting medical classes (in Indian medicine) in the Indian vernaculars, although instructions in Western medicine were added in 1827. The review of the progress of the N.M.I. by the Court of Directors

in 1828, revealed dissatisfaction among members of the Political and Military Committee.[11] The N.M.I. was, however, short lived, with the reformation strategies employed by William Bentick, the then Governor General of India, resulting in its abolition in 1835. The abolition of the N.M.I. and its replacement by the Calcutta Medical College in 1835 marked the end of the very first attempts at "a peaceful amalgamation of indigenous and western medical education."[12] It was also a turning point in the history of medical education in India as well as a benchmark for the way medical knowledge was to be taught, practiced and disseminated in colonial India.

In the Bombay Presidency, attempts to expand education continued unabated. It is possible to identify three phases in the spread of medical education. It started with hospital education in the year 1821, which included a three-year apprenticeship under the supervision of a surgeon and a five-year attachment to different hospitals for acquaintance with the practical details of hospital duty, qualifying those who completed the program as hospital assistants able to serve both indigenous troops and the regiments arriving from England. Dressing wounds, sores and fractured limbs and performing minor surgical operations under the guidance of the accompanying medical officers constituted an essential part of the practice of medicine learned in hospital education. Regular attendance on the sick wards provided further insight into individual cases of the indigent poor, their disease conditions and the prescription of remedies. In the next phase, hospital education was expanded by the establishment in 1826 of the Native Medical School (hereafter, N.M.S.) in Bombay, an institution that would follow the school of native doctors in the Bengal Presidency and provide a medical education on the principle that, as Charles Morehead, a member of the Bombay Medical Service in the 1820s, put it,

> the education of natives should fit them for the useful and safe practice of surgery and medicine and not the training of the hospital servants of the State.[13]

Medical instruction at the N.M.S. was imparted through Indian

[11] India and Bengal Despatches, Public Letter, 1835. For a detailed discussion on the Native Medical Institution, See Poonam Bala, *Imperialism and Medicine in Bengal: A Socio-Historical Perspective* (New Delhi,London: Sage, 1991), chapter 2.

[12] Bala, *Imperialism and Medicine in Bengal.*

[13] H.A.Hanes, ed., *Memorandum of the Life and Work of Charles Morehead* (London: W.H. Allen, 1884), 18.

vernaculars and the entire funding for the school came from the government, its expenses amounting to 8,383 rupees by 1831. Anatomical instruction was communicated by means of plates, casts and preparations, as opposed to the use of scalpel for medical investigation. The school was, however, abolished in 1833 when the Medical Board Committee decided to remodel it on the basis of providing practical knowledge of pharmacy, surgery and "physic" for the improvement of both the theory and practice of medicine. During its brief existence from 1826 to 1833, the N.M.S. trained 70 pupils, of which 21 were employed in military hospitals, while others were either discharged on account of lack of attendance, failure to perform well, or lack of professional etiquette. The final phase in the expansion of medical education witnessed the foundation of the Grant Medical College (hereafter, G.M.C.) in 1845. Successful attempts in bringing Western medicine and medical education to the Indian population in the Bengal Presidency were a factor in inspiring the colonial administrators to adopt similar measures in the Bombay Presidency. The establishment of the G.M.C. clearly reflected the pedagogical focus of Robert Grant (for whom the new medical college was named) on the study of anatomy, instruction in the English language and clinical teaching and practice in a hospital.

The period that saw the most changes in the profession and practice of medicine as well as in the State itself commenced toward the end of the nineteenth century, when two issues emerged as a consequence of the changes in the nature of the State after 1857. The first was the matter of encouraging an independent medical profession, or a "profession of Indian doctors," to extend medical relief through hospitals and dispensaries manned by hospital apprentices. The second was the fact that when the Crown assumed power in 1857, several feudal states were liquidated and new land revenue measures were imposed, both of which actions led to impoverishment of the Indian peasantry. The provision of medical services and their expansion in the mofussil areas where European Civil Officers were stationed, nonetheless, remained a priority for the British government; it also followed upon the colonial "necessity to ensure the continued efficient economic exploitation of the empire's natural resources."[14]

By the late nineteenth century and especially "from the 1870s tropical medicine, its ideology European, its instrument the microscope, its epistemology the germ theory of disease, served the interests of dominant

[14] Margaret Jones, *Health Policy in Britain's Model Colony Ceylon, 1900-1948* (Hyderabad: Orient Longman, 2004) 5.

economic groups and obscured the relationship of disease to the social structure."[15] While new ideologies were central to new perceptions of disease on the part of the medical community, the nationalist movement at the same time acquired prominence with the shifting social and political practices of imperative ideologies. The foundation of the G.M.C., for instance, with the aim of qualifying "a class of practitioners of medicine to displace the hakeems (practitioners of Unani medicine) and vaids (practitioners of Ayurveda) whose 'ignorance' was such as to render them rather injurious than useful to the people"[16], proved inimical to the professional base of Indian medicine. The Mutiny of 1857 also became a matter of central concern for the medical department when the issue of strengthening the subordinate medical service came to the fore. Moreover, the opening of the Suez Canal in 1869 expanded commerce and trade activities, thus opening up new routes for accessing the interior regions and facilitating an increase in cotton cultivation. With the expanding economic benefits of successful trade, the *Native Opinion* was prompt enough in recording that the "course of lecture existed….but the spirit seems to be gone."[17] In addition, in order to meet the increasing medical needs, the imperial State actively sought to deploy practitioners of Indian medicine. The impact of these policies was best seen in the government employment schemes between 1887 and 1898 that employed hakeems and vaids trained at the Lahore Medical College.[18]

New Visions and the Political State

The onset of epidemics in colonial India provided one major impetus to the way in which the prospects of health policies were to be determined, yet at the same time, in the Western world, it was shaped by the trajectory of development in the interwar years. Moreover, its contribution to and engagement in creating a wide gulf between Western medicine and Ayurveda, cannot be overlooked. The enforcement of measures to prevent the spread of the plague, for instance, making quarantine measures necessary in the nineteenth century, widened this gulf. Perceived threats of professional exclusion and marginality prompted advocates of Ayurveda

[15] Roy MacLeod, "Introduction" in *Disease, Medicine and Empire: Perspectives on Western Medicine and the Experience of European Expansion*, ed., Roy MacLeod and Milton Lewis (London:Routledge, 1988), 7.
[16] Grant Medical College, Bombay: Annual report of the Grant Medical College, Bombay, 1859/60-1861/62.
[17] *Native Opinion*, 4 June 1868.
[18] Proceedings of the Government of Bengal, Medical Branch, 1919.

to seek possibilities of bridging this gap and saving it from a complete fall from grace. In a similar vein, public health measures were often necessitated by the "global spread of epidemic" that "transformed modern medicine and led to the birth of modern public health."[19] As an example, when under these circumstances much of Uganda, the Congo Free State, the French Congo and the Portuguese territories, among others, were faced with one of the most noticeable and unprecedented health crises of the era, with their populations ravaged by human trypanosomiasis (sleeping sickness), "the policies chosen were influenced not just by individual scientists' recommendations or the national priorities of their governments but also by the transnational community of tropical medicine specialists who exchanged ideas, reinforced each other's positions and pushed their own agendas."[20] The Indian Contagious Act, promulgated in 1868, also had the effect of stirring anticolonial feelings among the Indian masses. Similarly, the mandatory registration of brothels and prostitutes and the examination and treatment of women afflicted with venereal diseases drew sharp criticism from nationalists, for the intervention was widely seen as "inappropriate and interfering with women's private lives."[21]

Toward the end of the nineteenth century and well into the early twentieth century, the economic conditions prevalent in India became a cause of concern for several nationalists. Prafulla Chandra Ray, with his nationalist outlook and patriotic sentiments, founded the first indigenous pharmaceutical company in the year 1901. Hailed as the father of the chemical industry in India, Ray pioneered the manufacture of drugs and chemicals in the country; his work also reaffirmed the significance of scientific knowledge in the establishment of the drug industry there. With a nationalist outlook and a keen sense of India's indigenous traditions, he was influenced by Gandhi[22] in seeking to employ indigenous technology

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[19] Pratik Chakrabarti, *Medicine and Empire, 1600-1960* (Basingstoke:Palgrave Macmillan, 2014), 96.

[20] Deborah J. Neill, *Networks in Tropical Medicine: Internationalism Colonialism and the Rise of a Medical Specialty, 1890-1930* (California: Stanford University Press, 2012)135.

[21] Blair D. Brown, "The Pros and Cons of the Contagious Diseases Act," *Transactions of the Medical and Physical Society of Bombay*, n.s., no. 11 (1887): 91-4.

[22] "Viewing the advance of modernity (industrialism and globalization) with trepidation, Gandhi saw the potential impact of capitalism on the body as both a health and a moral issue." Mark Nichter provides a detailed overview on Gandhi's views on health. See Mark Nichter, "The Political Ecology of Health in India: Indigestion as Sign and Symptom of Defective Modernization" in *Healing Powers*

and raw materials in addressing the economic needs of the Indian population. In this respect, nationalism was not always about attempting to modernize or reform medical tradition; it also had to do with cultivating and reclaiming indigenous skills, knowledge and practices and making these indispensable to the medical profession. Ironically enough, this perspective places less emphasis on the diffusion of "modern medicine" as an ontological entity beyond the West and more on how medicine in colonial India was reconstructed to give it the character that continued in postcolonial times.[23]

In explaining disease causation, the 1901 Census acted as a precursor to later explanations of 'caste-disease associations' by the colonial policy makers. The Census not only reified social and religious hierarchies but also enabled new ideas on political and administrative control of the Indian population through a meticulous numerical grouping of social divisions. As anticipated, explaining diseases through caste and social divisions was disfavoured by the Indian masses and fueled nation- wide anti-colonial sentiments and nationalistic anxieties. Quite clearly, the establishment of Arya Vaidya Samajam in 1901-2 by Vaidyaratnam (jewel among physicians) P.S.Varier, emerged as a successful venture in popularizing drugs manufactured according to indigenous methods for effective treatment of diseases; rich elites, princes and local influential patrons used the success of Arya Vaidya Samajam to favourably explain various notions and debates around professionalism in Ayurveda in later years.

Secondly, several events "that took place between 1905 and 1909 altered the political situation in the country with a spur in general disbelief and hostility toward the British rule."[24] The nationalist movement was, thus, also a consequence of the various policies that governed India. The partition of Bengal in 1905 by George Curzon, the then Viceroy of India, divided the Presidency into a Hindu and a Muslim nation-state; the effects of a "religious divide" of the population were far reaching and later reinforced religious consciousness among the people of India. In addition, the Morley–Minto Reforms, through the Indian Councils Act of 1909, while allowing Indians more power and presence in various legislative

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and Modernity: Traditional Medicine, Shamanism and Science in Asian Societies, eds. Linda H. Connor and Geoffrey Samueln (Westport, Connecticut, London: Bergin and Garvey,2001), 85-106, 86-7.

[23] Hormoz Ebrahimnejad (ed.), *The Development of Modern Medicine in Non-Western Countries: Historical Perspectives* (London: Routledge, 2009).

[24] Poonam Bala, "'Nationalising Medicine..'" in *Contesting Colonial Authority*, ed., Poonam Bala.

councils, clamped down on any attempts at establishing a colonial self-government. Not surprisingly, the Calcutta Medical Society's plans to register medical practitioners in Calcutta were abandoned as a result of "perceived hostility from the vaids and hakeems."[25] It was not until the Montague–Chelmsford Reforms of 1919 (passed through the Government of India Act) that a system of dual government, or "dyarchy," was introduced. This had larger repercussions on the indigenous medical systems and their practice, for it introduced the categories of "transferred" and "reserved" subjects; the former, which included education, health, industry and agriculture, came under the Indian ministers, while the latter, including finance, irrigation, revenue and law and order, came under the jurisdiction of the governor. The new move accorded with the "disease-specific" priorities of the Medical Research Council, newly created in 1919 and the foundation of an autonomous Ministry of Health in the same year.[26]

While most of these negotiations were based on an assumption of the scientific authority of Western medicine, they were never, wholly, accepted by Indian medical practitioners, even though claims of universalization of the West as history had driven "the Hindu intelligentsia to negotiate the relationship of classical knowledge with Western science and to represent their traditions as scientific."[27] Renewed interest in claims of reassertion of the scientific élan of indigenous medicine also meant indigenizing the power of Indian medicine, the main proponents of which were the Western-educated intelligentsia. Being fully cognizant of Western thoughts and practices and providing a cogent force behind the reformation of Indian medicine, they had perhaps begun to believe that

> it was the Indian scientists' breakthrough to the "world of science" that proved more powerful for the cause of science in India and its nationalist perspective than any colonial impediments or "troublesome political

[25] Poonam Bala, *Imperialism and Medicine in Bengal: A Socio-Historical Perspective* (New Delhi, London: Sage, 1991). Government control of medical education led to what Roger Jeffery calls "de-professionalisation" of Western medicine. See Roger Jeffery, "Allopathic Medicine in India: A Case of De-Professionalisation?," *Social Science and Medicine* II (1977): 561-73.

[26] Joan Austoker and Linda Bryer (eds.), "Preface" in *Historical Perspectives on the Role of the MRC: Essays in the History of the Medical Research Council of the United Kingdom and its Predecessor, the Medical Research Committee, 1913-1953*, eds., Joan Austoker and Linda Bryer (Oxford: Oxford University Press, 1988).

[27] Gyan Prakash, *Another Reason: Science and the Imagination of Modern India*, Princeton: Princeton University Press, 1999), 118.