



## From co-operation to Domination : The Changing British perspectives about Indian Medicines in the Nineteenth Century India



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**Abstract** - The introduction and spread of the Western Medicine in India had to go through a complex process of domination and cooperation. This article explores the possible stages of this process and then tries to go beyond the periodization by exploring the nature of this process in the conclusion.

**Keywords** - Western, Medicine, Domination, Cooperation, Native, Indian, Practices.

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**Introduction-** “In considering the question of the place which the indigenous system of medical treatment should occupy in any planned organization of medical relief and public health in the country, we are faced with certain difficulties. We realise the hold of these systems exercise don't merely the illiterate masses but over considerable section of the intelligentsia.... We are unfortunately not in a position to assess the real value of these systems..... We do not, therefore, propose to venture into any discussion in regard to the place of these systems in organized state medical relief in this country.”<sup>1</sup>

- Bhore committee report, Vol-2, New Delhi, 1946.

Colonialism, the single most important phenomenon of Modern Indian history has not only affected every aspect of Indian life but also has shaped it in many new ways. It was a large break from its pre-colonial past. Modern historians from the very early Nationalist to the contemporary Subalterns have tried their best to identify the nature and character as well as the agents of the colonial changes in India. Unlike the political and the economic history, this field of Medicine and Public health has come late under the focus of the historians but has made great progress in recent years. The focus of this paper would be on how the British at first tried to cooperate with Indian medical system but then moved towards a dominating position in the last decade of the nineteenth century. The Core-Peripheral relationship as well as the internal inconsistency in the process of domination would also get a special mention. These questions are important not only to understand an important agent of British in colonizing India but to see how far they had succeeded in their mission of 'Colonizing the Body'.

Diseases are an integral part of human life. As we use to say- Where there is a problem there is a solution, medicine was the solution of disease and humans from the very beginning were conscious about it. Though

sometimes they had tried to depend on Magic, prayers and mantras, there was considerable use of various medicines, mostly herbal. India is one of those ancient civilizations who had made great progress in the ancient time. Medical references can be found back to Indus civilization in third-millennium B.C.E. But the major progress has happened during the Post-Vedic period. Ayurveda was the ancient system of medicine in India. It reflected a transition in therapeutics from association with religion and magic of Vedic time to a more rational and scientific method of treatment.<sup>2</sup> We have a large number of medical text of this trend such as Charak Samhita, Susruta Samhita, Astanga Samgraha, etc. As per the traditional view, in course of time when religion became more orthodox, these pieces of knowledge became static and unprogressive. But the progress, though limited, was there through commentaries of these texts and memories.

With the coming of Muslim Rule, the Unani system of medical knowledge originated in Ancient Greece and later developed under Caliph Rule in Baghdad, arrived in India. Though there was an encounter in many other fields, surprisingly or maybe because of the practical value of Ayurveda, these two systems of medicine had maintained a peaceful co-operation. There were peoples like Miyan Bhuwah who had practiced both systems. These two systems together came to know as- 'Tibb'. Many of the Sanskrit works were translated into Arabic and Persian. Mughal court patronized these medical systems.

Medical interactions with Europeans in modern times had started from the time of the European travellers. Francois Bernier, Niccolao Menace, Johan Ovington and others wrote a great deal on Indian Medical practices. There were no great differences at that time. Both were humoral and as the Indian diseases were thought to be environmentally determined, Indian methods were considered as the best suited for them. With the colonial rule in the latter half of the Eighteenth century, the course of Indian history marked a major shift. But in the case of medicine, there was no great shift initially. In reality, company was not in a position to introduce Western medicines in India. Moreover, as I have already mentioned before, there was theoretical similarities of Miasma as well as the environmentalist theory, it didn't leave any great reason for the British to introduce the Western Medicine. The situation started to change from the 1830s and the final shift happened in the last of the nineteenth century. For a better understanding of this great shift from Co-operation to Domination, I would like to discuss it in three phases- from the beginning of the nineteenth Century to 1835, from 1835 to 1860s and from 1860s to the end of the nineteenth century.

### **The first phase: An age of peaceful cooperation**

India in terms of the medicine was not completely unknown to the Europeans but the knowledge was very limited. Western medicines were practiced in very limited European enclaves such as Calcutta, Madras, Bombay, Surat, Goa, Pondicherry, and Dacca<sup>3</sup>. For few reasons like- being far away from home, a lack of the western doctors and medicines, the concept of Environmental determinism and a belief on century-old Indian medical traditions, Europeans at this time moved their favour to the Indian medicines. The public health was not their concern for long and the main focus was on the health of the army. In a way, there was no State Medicine but the military medicines. During the high Victorian age, Europeans were roaming around and exploring places unknown to them. Their new corpus of colonial knowledge on Indian material world not only leads them towards a better understanding of its subordinates politically and socially but also medically. On the other side of the world, medicine had started to take a shape of Science through close observations and experiments. For company officials, India was not a professional exile anymore but a great

laboratory for observing and investigating the new diseases. The medical books and treatises which were written at this time out of their yearlong experiences have great importance. They tried to understand the impact of culture, society and environment in diseases, the needs of Indian peoples and the large regional variations of diseases. These texts had guided the new members who came in India and contributed to the wider scientific community beyond India. Medicine at this time emerged as 'the Master Narrative of Scientific discourse in India' and had contributed a lot in other fields. As D. G. Crawford said- "many of the pioneers of Botany, Zoology, Geology, Meteorology, Ethnography and Philology in late eighteen- early nineteenth century were medical practitioners."<sup>4</sup>

Besides these, there was an influential Orientalist group who tried to glorify the ancient Indian history. William Jones was the most prominent of them. He wrote a memory named- 'Botanical Observations on selected Indian plants' (1790-1800). Whitelaw Ainslie and his work-'Materia Medica of Hindoostan' was another influential work. Some other important works of this time are 'Observations on the Diseases in long voyages to Hot Countries'(1773) by John Clarks, 'An account of Diseases of India as they appeared in English fleet and in Naval Hospitals in Madras' (1802 ) by Charles Curtis, 'Essay on Diseases, Incident to Indian Seaman, or Lascars, on Long Voyages'(1804) by William Hunter, 'Clinical Illustration of the More Important Diseases of Bengal' (1832) by William Twining, 'Sketches of most prevalent diseases of India' (1828) by James Annesley, 'The influence of Tropical Climates on European Constitution' (1813) by James Johnson.

On the other hand, the colonial government due to its various inabilities also tried to promote Indigenous medicines here. In 1813 The Court of Directors said- "there are also many tracts of merit, we are told, on the virtues of plants and drugs, and on the application of them in medicine, the knowledge of which might prove desirable to Europeans practitioners, and by such intercourse the nation might gradually be led to adopt the modern improvements in these and other sciences"<sup>5</sup>

The year 1822 marked a very important incident- the establishment of Native Medical Institution (NMI) in Calcutta. Some medical classes on Ayurveda and Unani were also introduced in Calcutta Sanskrit College and Calcutta Madrasa. These establishments had great importance at that time. The Bengal Medical Board had prepared the Regulations of these institutions. The number of students was restricted to 20 and knowledge of Hindustani and Persian was compulsory. Eight rupee scholarship was given to them. In this institution, there was no religious or caste discrimination and students were appointed in the Army after their course. Few others were also appointed in Hospitals wards and dispensaries to help in dressing patients and control medicine. More importantly, the medium of instruction was Vernacular. Even the translation of short treatises on Anatomy, medicine and surgery were prepared. Due to the religious restrictions, dissection of the human body was avoided and was practiced on animals. With the progress of time, the number of students was raised at 40. A vocabulary of Persian and Nagri terms was made. Similar schools were started at Bombay in 1826 and at Madras in 1827. Later the Bombay school was abolished in 1832.<sup>6</sup> A small hospital was also made along with Sanskrit college in 1832 in Calcutta. More teachers were appointed to give lectures on Ayurveda in Sanskrit. Tayler said- "The education of Indian peoples should be given in their mother tongue, if possible, and that the English language should not thrust on such a rich medium of instruction as Sanskrit language."<sup>7</sup>

So we can see that the government took steps to encourage and enrich the Indian Medical system with a limited introduction of western medical advantages. For the study of anatomy and dissection, the government provided Skeletons. Translations of European works in vernacular like Madhusudan Gupta and his Hooper's 'Anatomists Veda-Mecum' are clear indication of peaceful co-operations.

### **The second phase: Age of internal contradictions**

This Peaceful Cooperation came to an end in 1835 with the abolishment of Native Medical Institutions. In 1828, the first review came out which was Satisfactory to the Court Of Director. But when W. Bentinck came as Government general, he appointed a committee in 1833 for “improving the constitution and extending the benefits of Native Medical Institution”. On Oct. 1834 the committee had submitted their report and the defects like– the absence of proper qualifying standard of admission, the omission of practical human anatomy in the course of instruction, shortness of period of study, the problematic model of conducting the final exam, etc. were found.<sup>8</sup>

It was very much possible to introduce new reforms within the existing model. But the closing of the Native institutions was part of a larger scenario which includes one of the most controversial and well-studied debate, Orientalist-Anglicist debate. From the very beginning, the Indian administrated was greatly influenced by Oriental studies. But gradually the Early British perception about India got changed. In Britain, the Anglicist and Evangelicals became powerful and put more and more pressure on the Indian government for a change in favour of the European line. Their ideological base was built upon the concept of India as- ‘The Other One’. According to them India was a great civilization in the ancient time but had declined and its people, without any light of modernity were living a life of eternal pain, poverty and slavery. To take India out of this dark Cul-de-sac and to put it in the highway of modernization and civilization, it’s important to introduce the European knowledge system in the English version. The ultimate victory of this group was the ‘Macaulay minutes’ which not only had changed the course of the general studies but also of the native medical study based on the Co-operation. Instead of that, they had established the Calcutta Medical College, a pioneering western-style medical institution in the East. Some of the most important recommendations of this committee were to abolish the medical classes in Sanskrit college and Madrassa, to appoint the students capable of passing the final exams as native doctors, to place the new medical college under the control of the Education Committee, to introduce English as the medium of education and strict learning of the principles of European Medical Science, to admit the students of the age between 14-20 and to appoint the European superintendent who would instruct the pupils in anatomy, surgery, medicine, and pharmacy, etc.<sup>9</sup>

So there was a crystal clear shifting from the co-operation. Many of the recommendations not only show a shift but an aim to establish better organization or systemization to produce Doctors. More focus was given on practical learning. Both the Anglicist and missionaries had some role in this. Missionaries, influenced by the post-Enlightenment Christian Humanism tried to promote Christianity in the ignorant and backward lands like India. We can track down this reflection when a later European Medical Missionary observed –“for the continued preservation of Christianity to Hindus and Muslims, there is no more potent agency than the work of Medical Mission.”<sup>10</sup> No doubt they also had a considerable influence on the changing policies as they thought Western Education in English would favour their mission.

The changes among the Government officials were another important agent of this shift. The new group of officials influenced by the Anglicism saw the Indian medical systems as their rival and mentioned them as irrational, unscientific, and subordinate. For Heyne, majority of Indian practitioners were “Illiterate pretender to knowledge” and most of whom were “quacks, possessors and vendors of nostrums.”<sup>11</sup> With the growing confidence and political authority, western medicine had detached itself from the Humoral

Pathology by 1860s. So the bridge which had connected Indian systems and the western system was broken and the Indian Medical systems became a direct rival of the Western system. It was visible in the objective of Bombay Grant Medical College, where Morehead advised to counter the – “demoralized effects of irrational, superstitions and too often criminal empiricism”<sup>12</sup> of the Indian Practitioners. Even few newspapers gave a call to the government to suppress these evils of indigenous practitioners as they did with Thugs.

Despite all these calls for exclusion and suppression of Indian Medicine, Government took a different stand. The Indian government was never truly concerned about the Public health. So they were not ready to use very expensive and irregular Western Drugs in place of regular, locally available and cheap Drugs. The theory of Environmental determinism was still very prominent and it was thought that the local drugs were most effective for the local diseases. A group of officials such as William Brook O’Shaughnessy wrote- ‘Bengal Pharmacopoeia’. The government had also established a Medical Laboratory in Calcutta for preparing medicine and to know their effects. Few Europeans had introduced some indigenous remedies in the dispensaries around Bengal. Local medicines like – Kala Dana, Kut Kelija and a drug Composed of Opium and Calomel were found effective during Cholera epidemic of 1839-40.<sup>13</sup> This trend will continue up to 1860s before the standardization of Western medicines.

In Europe, the western medical knowledge was progressing in its full speed. In India, the first batch of students had passed their exams in October 1838 and was appointed in various hospitals all over India. It indirectly helped in circulating western medicine from its Indian core Calcutta to the peripheral areas. This one area has not received much attention from historians. January 10, 1836, marked a red-letter day in the history of Medical education as Madhusudan Gupta in the Calcutta Medical College for the first time performed a human body dissection. It broke down the century-old prejudice and marked a clear victory of Western Medical Practice. On October 28 of the same year, a student Rajkrishna Dey had also performed dissection on the human body. Significance of these dissections can be traced down from a speech of Dr Charles Francis in 1868 – “My young Friends- there is a portrait (of Madhusudan Gupta) in this theatre which tells a revolution in your country... an epoch pregnant with momentous blessings to India.”<sup>14</sup> New chairs were added in Calcutta Medical College. New courses were also introduced for a better understanding of Western Medicine and education. Previous Courses were rearranged like - Chemistry was separated from Materia Medica in March 1842, Anatomy and Surgery were separated from Midwifery in Feb 1850, Medical jurisprudence instituted in 1850.<sup>15</sup> The importance of these developments shows that Government was becoming more and more conscious regarding the spread and well development of Western medicine in India. In 1846, The University of surgeons and Society of Apothecaries had recognized the medical education at Calcutta Medical College.

But all these steps were not enough to tackle the medical needs of the vast population of India. So again the government had to move back to create a proper body of Indigenous Practitioners who can at least handle the medical need of rural India and play the subordinate roles. Moreover, there was a demand for these Indigenous Practitioners in Indian Regiments. So it was time for the government to reconsider their old declarations.

On August 1839, the government gave an order to revive the study of the Indian medical systems in vernacular. Additional classes were added at Calcutta Medical College. Even though the teaching method was

European, Materia Medica, anatomy, medicine and Surgery were taught in Urdu and Hindustani. Various facilities including scholarships were given. These Students had to perform particular duties in hospitals and also had to give a final exam before becoming a Native Doctor. Further progress took place in 1851 when Bengali vernacular classes were added with it. Medical schools started to spread over the country like – Madras Medical college(1835), Travancore(1835), Hyderabad(1840), Ajmer(1848), The Grant Medical College(1845), Agra(1853), Lahore(1860), Sealdah(1873), Nagpur(1867), Nellore(1876), Patna(1874), Dacca(1870), Indore(1878), Ludhiana(1895), Travancore(1835).

If we take a quick look at the geographical location of these above-mentioned places, we can easily see how the British gradually spread the medical institutions all around India. They had started to come out of their European enclaves of Army Cantonments and Presidency towns. So the process of domination was ready to take its journey further in the hinterland. This phase from 1835 to 1860s at first faced clear trends of the medical domination but soon the government had realized the problems of maintaining a small number of western doctors with insufficient western drugs for a country so vast and diverse. The question of economic rationality became very important as the East India Company was a trading corporation whose interest was in economic profit, firstly and lastly. So, there can be no doubt on why they had chosen Native Doctors and drugs even under a pressure from their Metropolitan.

### **The third phase: Towards domination**

The most important change took place in between the 1860s and 1900 when both the affairs of metropolitan and periphery had affected the historical course of medicine in India. After the Mutiny of 1857, there was a major shift in Indian administrative structure which had changed the authority and the nature of the government. As the British government came into power directly, they had to take greater responsibility for the well-being of the general population. So issues like the welfare of peoples and their good health and happiness came under great importance.

The technological changes or scientific developments always had an impact on History. In the case of India, developments in Metropolitan are important to see. The 1860s was probably most important time for Europe when people not only became more conscious about sanitary measures and nutrition but other two most important changes had revolutionised and put Europe ahead of everyone- the rise of regularised independent medical profession and Standardization of medicines.

In the 1850s, the pharmacopoeia in Britain marked a watershed. After the Medical Act of 1858, the General Medical Council had recognised the British Pharmacopoeia. It was more than a mere listing of drugs and focused on the compound and manner of preparing drugs, their fixed weight and measures. In 1864 it was published for the first time and became very famous.

This standardization of medicine was a great escalate to the medical practitioners in India who were under the compulsion to find out indigenous pharmacopoeia to survive the competition. But they failed in this task and thus left a space for Europeans to be more and more critical about Indigenous medicines. Moreover, the victory of the new germ theory marked a complete break from its past. Uday Chand Dutt in the Materia Medica had discussed the Humoral observations of Indian medicine which were 'not so much the result of

observation and experience'.<sup>16</sup> Even nationalist leader like Mahatma Gandhi in one occasion talked about the 'unsatisfactory state of these medicines'. Western practitioners, both Indians and Europeans started to maintain a distance from it. These medicines, as not properly refined and measured, were considered unsafe. So they put more pressure on the government to go for Western Drugs. Due to the high cost and very irregular supply of western drugs, the government again denied the proposal. A.P.Howell instructed the Medical department – "supply of European medicines be limited strictly to those medicines for which no native drug could efficaciously be substituted."<sup>17</sup>

The Calcutta Medical College took initiative to make a Pharmacopoeia of India and it was published in 1868. Unlike the British, it had no legal force. The increasing professionalization of European Practitioners put great stress on Indian Vaidya's and Hakims. This professionalization had provided a perfect excuse to a group of Europeans to launch western medicines and to create a pressure on the government. Edgar J. Sprtling in 1902 said-"Brothers, there is where our power lies... the real arbiters of the great body politic society. And think of the social power we even now wield...the people will demand this and the law will give it: we have only to stay awake and be aggressive...could ask for firmer standing ground or a longer lever with which to move the world?"<sup>18</sup> Indian Medical Service and Indian Western practitioners also started to claim their superiority and were asking for a Registration Act. The final attack came when a Drug industry rose in Britain out of German Influence and the problem of insufficient delivery was solved. Though a few indigenous practitioners tried to improve their standardization and scientific base but failed to have the state support. Ultimately by the end of the century, the Western Medicine was in a dominating position, not in the rural areas but in the towns among the English educated peoples.

## **Conclusion**

After all these discussions we can understand the stages of the transformation of the relationship between the Indian medical systems and Western medical system. There was no immediate conquest as many scholars use to think. Even as D. Arnold has said-"the relationship between Western and Indian medicine needs to be looked at in a more Pluralistic and dialectic terms, terms that allow for a continuing interaction between the two during the long history of colonial rule in India."<sup>19</sup> The periodization that has been put forward in the existing works like that of Poonam Bala has roughly marked 1860 as the watershed where the age prior that was an age of cooperation. But as we have seen, there was a high contrast within the official circle. So it's not wise to mark such an age with cooperation. The best option is to escape the traps of periodization as they are never perfect. But for the sake of a better understanding if we need to make a periodization along with all its imperfections, then 1835 should be considered as an important break from the existing tradition. Thus the whole century can roughly be remodelled into three parts, from the beginning to 1835, from 1835 to 1860 and from 1860 to 1900.

Scholars like Daniel R. Headrick have said that medicine might be a 'Tool of Empire'. This is very controversial. British were never fully confident about applying Western medicine in India. Medicine was also largely influenced by political and economic factors. The growing nationalist encounter to Western medicine was an obstacle in its way of rapid progress. As Jayanta Bhattacharya says-"the colonial discourse on medicine was mediated not only by considerations of political economy but also by several factors. Polity, biology, ecology, the circumstances of material life and new knowledge interacted and produce this

discourse.”<sup>20</sup> This new knowledge was important in shaping the policies regarding Indian medicine. It is also very important to look at the Core-periphery relation. G. Basalla and his three-stage model of spreading western science are may not be perfect for the Indian case. His model talk’s about a non-scientific society (non-European) provides a source for European Science in stage one, colonial science in stage two and the process of transplantation with a struggle to achieve on independent scientific tradition or culture in stage three.<sup>21</sup>

But there was no single way traffic during the first phase. Britain also had contributed to India a lot in that period. In the second phase, we can see, colonial science was detached from the colonial interest. The term colonial interest is even more controversial. If we observe the colonial medical policy, we can easily see that the economic interest was more important up to a very long time. The government was not ready to spend money on Western drugs which day by day was becoming more costly. The third phase marked the great difficulties of this model. In India, unlike the USA or Canada, people have a century-old medical tradition. At the same time, the Western medical practices got a strong supporter group. The middle class or the English educated ‘Babu’ class was a great supporter of it. This group often had fought against the traditional practitioners over the value of Western medicines. The question of the space which has been neglected should now come in the fore. Studying medicine in isolation cannot clarify its social dimension. Colonial rule and education have created a new space within the indigenous society. A new middle class that emerged as the progressive force had a good idea of tradition and legality. This English educated middle class or Bhadralks correctly realised the source of power which is the state and its legal implications. Demands for the Regulation acts and Registration acts show a well-developed and new consciousness among this class. The education which gave them a sense of superiority also had misguided them. They failed to realise the values attached to the traditional practices and folk medicines. This very same thing shows their arrogance and intolerance towards traditional and subaltern knowledge’s. Europeans who were looking forward to cultural domination through medicine had found a powerful ally among the Bhadralks.

Another important aspect we need to focus on is that India is a big country with great diversities. If we focused more on the structure, we can find out that Britain was not the only Core or Metropolitan. The presidency towns largely functioned in the same way. The rural areas which were treated like the peripheries were the most important stronghold of Indian medical systems, even up to a very recent time. British medicine had largely failed to penetrate there. They were happy with their medical progress which gave them a sense of superiority. People like Ronald Ross believed that British imperialism was first and foremost a civilising force and British introduced ‘what was necessary for civilization, a final superior authority’. <sup>22</sup> According to him hospital was one of them. But the extent of such confidence is questionable. Western medicine up to the end of colonialism remained confined among the elites and middle classes mostly. The larger section of the subalterns and tribes were not in touch with it. So the core-centric nature remained intact.

In the closing section, we can say that the domination of Western medicine on Indian medicines were never successful because of its limitations. Again there was no single route traffic. Both took a few things from each other. Colonies were influenced by the developments of the metropolis but did not necessarily was in a peripheral role always. As Mark Harrison said – “the colonies provide access to a range of drugs that were not commonly available in Europe ... British India was also the source a major revolution in therapeutics based



on the use of calomel, or mercurous chloride.”<sup>23</sup> May be through a better observation, we can find out some more examples like that.

## Endnotes

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