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Quick Response Code:

Website: https://journals.lww.com/ijar
DOI: 10.4103/ijar.ijar_20_22

Contribution of Bengal school for the protection of traditional Ayurvedic knowledge in colonial India

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ABSTRACT:

Ayurveda is the age-old medical system in India and probably the oldest medical science. Ayurveda is still practiced as a leading healthcare measure in India and has been spread globally. The journey was not smooth; many obstacles came in the way of the existence of Ayurveda. The most difficult hurdle came during the British rule in India. The British rulers introduced and established their knowledge and culture at the cost of traditional Indian heritage and culture. As traditional knowledge of medical science in India, Ayurveda also faced challenges. The Ayurvedic physicians from Bengal, by the able leadership of Kaviraja Gangadhar Ray and others, had protected successfully the traditional Ayurvedic knowledge in Bengal in particular and in India in general. They had established Ayurvedic treatment centres (~*Chikitsalaya*), pharmacies for the production of Ayurvedic medicines on a large scale, and institutions (Tol/Chatuspathi) for providing free Ayurvedic knowledge to the students. Disciples of the Bengalee Ayurvedic Guru have spread throughout India and protected this great knowledge of medical science at that time. The condition of Ayurveda in India and the contribution of Ayurvedic physicians to protect Ayurveda in British India have been highlighted in this article.

Keywords:

Aushadhalaya, Ayurveda, Bengal, British, Chikitsalaya

INTRODUCTION

Ayurveda is the oldest existing health science in the world. This branch of knowledge is believed to be originated 5000 years ago (at 3000 BC). The Ayurvedic knowledge still flows with dignity, despite various hurdles. In the texts of Ayurveda, it is claimed that Ayurveda is *Shashwata* (~eternal). Three reasons are mentioned for the eternality of Ayurveda, i.e., *Anaditwa* (~it has no beginning), *Swabhava Samsiddhatwa* (~deals with things inherent in nature), and *Bhavaswabhava Nityatwa* (~eternal natural manifestations).^[1] Many hurdles in the forms of lack of government support, denial of permission to practice, and prevention of teaching came in the way of

Ayurveda. However, this great science has successfully overcome all the hurdles and is still flourishing with glory.

The most powerful obstacle came in the way of the existence of Ayurveda during the British rule in India. In Colonial India, an attempt had been taken by the British rulers to ruin this great branch of health sciences completely. However, the attempt was unsuccessful due to the determination of the Ayurvedic physicians to protect their science from the western invasion. Moreover, in that odd struggle, the Ayurvedic physicians from Bengal played commendable roles. This was also a freedom fight; a fight to protect Indian traditional heritage, culture, and knowledge from British aggression.

Initially, during the late 18th and early 19th century, it seemed possible that the

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How to cite this article: Sarkar PK. Contribution of Bengal school for the protection of traditional Ayurvedic knowledge in colonial India. *Int J Ayurveda Res* 2022;3:102-17.

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Received: 22-07-2022

Revised: 06-11-2022

Accepted: 11-11-2022

Published: 31-12-2022

Ayurvedic and Allopathic systems of medicine could live in peaceful co-existence and mutual accommodation. However, gradually, with professional pressure from Britain and State sanctioning in India, western medicine moved to a dominant position in the State provision of medical services. By the end of the 19th century, advances in western medicine undermined the similarities of theory and practice of another system of medicine.^[2] At that time, a movement was needed for the protection of this great science. The Ayurvedic physicians from all over India in general and from Bengal, in particular, had fought and attempted to protect the ancient wisdom of medical science, the Ayurveda.

The Ayurvedic system of medicine got momentum from the “Swadeshi” or Nationalist movement in the early decades of the 20th century. Advocates of the noncooperation movement prevented the sick and poor from attending western medical hospitals, and instead advocated indigenous methods of treatment.^[2]

BACKGROUND

The British Rulers in Colonial India had always tried to impose western heritage and culture over Indian traditional knowledge and culture. They used the government funds for spreading the English language and western culture. In the year 1813, the East India Company decided to fund D-100,000/- per year for the promotion of English literature and knowledge of science to the Indians. It continued for 20 years. In 1833, Lord William Bentinck, then Governor General of the British East India Company formed a committee headed by T. B. Macaulay for reallocating the funds required by the British Parliament to spend on literature and education in India. The version of Macaulay for renewal of this Company’s charter was like that “I see a government anxiously bent on the public good. Even in its errors, I recognize a paternal feeling towards the great people committed to its charge. I see toleration strictly maintained. However, I see bloody and degrading superstitions gradually losing their power. I see the morality, philosophy, the taste of Europe, beginning to produce a salutary effect on the hearts and understandings of our subjects. I see the public mind of India, that public mind which we found debased and contracted by the worst forms of political and religious tyranny, expanding itself to just and noble views of the ends of government and the social duties of man.”^[3]

He summarized his recommendation with these words “To sum up what I have said, I think it is clear that we are not fettered by the Act of Parliament of 1813; that we are not fettered by any pledge expressed or implied; that we are free to employ our funds as we choose; that we ought to employ them in teaching what is best worth knowing;

that English is better worth knowing than Sanskrit or Arabic; that the natives are desirous to be taught English, and are not desirous to be taught Sanskrit or Arabic; that neither as the languages of law, nor as the languages of religion, have the Sanskrit and Arabic any peculiar claim to our engagement; that it is possible to make natives of this country thoroughly good English scholars, and that to this end our efforts ought to be directed.”^[3]

Finally, the English Education Act came into effect in 1835. The Act had four major objectives; first, all the funds appropriated for education would be best employed for the promotion of the English literature and science among the citizens of India; second, stipend to the students and professors of vernacular languages would be stopped; Third, no portion of government funds would be employed for the printing of oriental books; and fourth, all the funds would be employed in imparting to the native population. Knowledge of English literature and science will be communicated through the medium of the English language only.^[4]

This education act broke the backbone of the traditional Ayurvedic education system of India. Ayurvedic education in the institutes was stopped due to noncooperation from the British government. The publication of Ayurvedic books was halted due to a lack of funds from the government. Thus, Ayurvedic knowledge became at a standstill in its land.

THE THREE INDIGENOUS MEDICAL POLICIES

The indigenous medical policy in Bengal was laid in 1822. The policy can be summed up in three phases according to the relation between the Ayurvedic and allopathic medical systems in Bengal. In the initial phase, there was a peaceful co-existence and incorporation of the indigenous forms of medicine. This was based upon the similarity of theories of treatment and the exploration of pharmacopeia. This co-existence lasted until the 1860s.

In the second phase, the increasing professionalization of medicine in Britain and the standardization of drugs led to differences of opinion between the two forms of medicine. In each of the first two phases, the State, for reasons of economy, had an interest in promoting indigenous medicine and medical practice. Medical training was included as an essential part of this policy. It was a force for cooperation between indigenous and western systems.

In the last phase, which started toward the turn of the 20th century, there was a rise in the chemical industry in Europe and the increasing professionalization of medical

practice. Allopathic medicine, at this stage, exhibited great divergence from Ayurvedic medicine, and thus posed a far greater threat to Ayurvedic medicine than in earlier years. In response to this, the nationalist movement called for the regeneration and extension of the Ayurvedic system of medical practice in India in general and in Bengal in particular.^[2]

CHALLENGES

During the British rule, the Ayurvedic system of medicine faced many challenges from different fronts, in the field of education, practice, medicine, and others. From abolishment of the medical education in indigenous languages in 1835 to the establishment of Ayurvedic College in 1916, these 80 years were crucial in the history of Ayurvedic education in India. After the establishment of Calcutta Medical College in 1835, the British policy was to push out the indigenous medicine of India and to patronize the western medical system. It became very difficult to get interested students and to make them learn Ayurveda in the Sanskrit language. At that time, many Ayurvedic scholars from Bengal continued to teach Ayurveda by keeping students in their own homes and teaching them in their own *Tol* or *Chatushpathi* free of cost. Many landlords and kings have supported these activities.

Another challenge that came in the field of Ayurveda is the availability of Ayurvedic medicines. Initially, the imported, and later both imported and manufactured allopathic drugs ousted indigenous Ayurvedic medicines from the market. An onrush of allopathic drugs brought about a challenge to Ayurvedic medicines. This challenge was faced by the Ayurvedic physicians by establishing many Ayurvedic drug manufacturing units. The indigenous reaction to this challenge took two different paths. On one way, there was the regeneration of pure classical Ayurvedic medicines, some sort of revival of the past heritage. On the other way, there was acceptance of modern ingredients and modern methods, to cope with the need of time.^[5]

The practice of Ayurveda in society, particularly in urban India faced another challenge. This challenge came when the British Government appointed British physicians and passed out allopathic physicians from the medical colleges in India as Health Officers. They were called Native Doctors. The Ayurvedic physicians faced this challenge successfully, they introduced the fixed consultation fee, which equalled or surpassed the fee of the contemporary British physicians practicing in Calcutta. At the same time, they treated the poor free of cost. They also introduced a fixed

price list of Ayurvedic medicines and advertised the same in newspapers as was the norm for western medicine. All these timely initiations taken by the visionary leaders helped in successfully overcoming these challenges.

KAVIRAJ GANGADHAR RAY THE GREAT SCHOLAR (1798–1885)

Kaviraj Gangadhar Ray [Figure 1] was a scholar, who along with his followers protected the traditional Indian system of medicine from the resurgent spread of the Allopathic system of medicine for more than a 100 years. He with his disciples and others like Kaviraja Gayadas Sen, Haran Chandra Chakraborty, Dwaraka Nath Sen, Shreecharan Sen, Jadunath Sen, Paresnath Kaviraja, Gangaprasad Sen, Jogindranath Sen, and others, had practiced and popularised the Ayurvedic treatment in India during the 19th Century and prevented the massive invasion of allopathic system of medicine in India at that time.^[6,7]

He was the scholar, who gave a new direction to Ayurveda in the changing situation of Ayurvedic education in colonial India. He had started a pharmacy and opened a dispensary in Calcutta. Later, he shifted to Murshidabad and started practicing and teaching Ayurveda. At that time, Murshidabad became a famous center of Ayurvedic education. He established Gangadhar Niketan, *Chatushpathi* for aspiring *Vaidya* (~Ayurveda Physician), who would wish to learn Ayurveda. Soon the institution became famous for training the best Ayurvedic physicians. He trained several disciples, who propagated Ayurveda in the country with their sound knowledge, dedication, and sincerity. Kaviraja Gayadas Sen, Kaviraja Haran Chandra Chakraborty, Kaviraja Dwarakanath Sen, Kaviraja Paresnath Sen (Kashi), Kaviraja Hariranjana Majumder (Delhi),

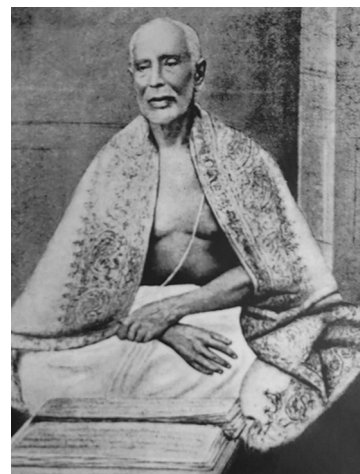


Figure 1: Kaviraj Gangadhar Ray

Kaviraja Gnyanendranath Sen (Patna) were some of the renowned disciples. In 1868, Kaviraja Gangadhar used the Samvada Gnyanratnakara Press to print and publish Jalpa-Kalpataru, a detailed compendium on Charaka Samhita in Sanskrit. By then, his batches of brilliant students depicted their competence as they studied Sanskrit texts and practiced ancient traditional medicines.

DISCIPLES OF KAVIRAJA GANGADHAR RAY

Kaviraja Gayadas Sen

He was the eldest and favorite among the disciples of Kaviraja Gangadhar Ray. He used to prepare the medicine as per the instructions of Kaviraja Gangadhar. His native place was Birbhum, the great soil of Acharya Chakrapani. He was a famous *Nadi Vaidya*. He could perfectly infer the prognosis of the disease by examining the pulse. He was invited by the then kings of Hetampur Estate, Birbhum District, and many landlords for treatment. Many patients from different parts of the country used to come to the little village of Birbhum to get relief from their ailments that was the popularity of Kaviraja Gayadas Sen. His son, Shitanath Sen was also a great physician.

Kaviraja Haranachandra Chakraborty

His native place was Rajshahi, presently in Bangladesh [Figure 2]. He was the direct disciple of Kaviraja Gangadhar Ray. He was a renowned physician at that time, he was infamous for the treatment of chronic and difficult diseases. He used to perform different types of surgeries. Specifically, he was an expert in ophthalmic surgeries. He had written "Sushrutartha Sandipani," the famous commentary on Sushruta Samhita.



Figure 2: Kaviraja Haranachandra Chakraborty

Kaviraja Dwarakanath Sen (1843–1909)

He was one of the leading physicians in India at that time [Figure 3]. He was born in Faridpur, Bengal in 1843. He started his dispensary in Calcutta in 1875, and within a short period, he became a great physician. His patients came not only from Bengal but also from different parts of the country. He further continued teaching to many disciples in his dispensary. Umacharan Kaviraja of Kashi, Swami Lakshmiram of Jaipur, and his elder son Kaviraja Jogindranath Sen are a few eminent scholars who were trained by Kaviraj Dwarkanath Sen. He was crowned by the title "Mahamahopadhyaya" by the Government and he was the first to get be honored by such unique adjudication.

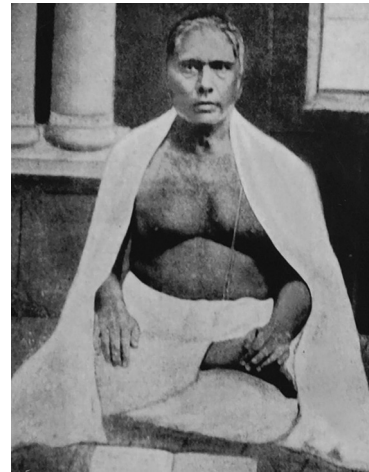


Figure 3: Kaviraja Dwarakanath Sen

OTHER PROMINENT AYURVEDIC SCHOLARS OF BENGAL

Kaviraja Gangaprasad Sen (1824–1896)

The name and fame of Kaviraja Gangaprasad Sen were spread far and wide and patients used to come to him in hordes. His father Nilambar Sen was also a renowned physician whose medicines were so potent that limericks were written praising him. Sri Ramakrishna Paramahansa often praised Kaviraja Gangaprasad as the doctor with a Midas' touch. He probably was the first person to export Ayurvedic medicine to Europe and America. He introduced the fixed consultation fee, which equalled or surpassed the fee of the contemporary British physicians practicing in Calcutta. In the same way, he introduced a fixed price list of Ayurvedic medicines and advertised the same in newspapers as was the norm for western medicine. He was the first to publish an Ayurvedic journal in Bengali named Ayurveda Sanjivini for upholding the stature of Ayurvedic medicine [Figure 4]. He established a Tol system to educate physicians in his home, where students were

provided free room and boarding along with free coaching of Ayurveda.

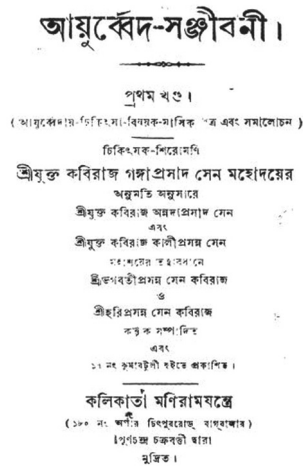


Figure 4: Ayurved Sanjavini Journal

Kaviraja Bijayratna Sen (1858–1911)

He took birth in a Kaviraja family in Bikrampur, Bengal, in 1858 [Figure 5]. He learned Ayurveda from his maternal uncle, Kaviraja Gangaprasad Sen. Later on, he trained in Shalyakarma from Kaviraja Kaliprasad Sen. His name as a physician flourished in India as well as abroad. Many of the then-government officials were his patients. He inspired and made them attracted towards Ayurveda. He published a Sanskrit commentary of Ashtanga Hridaya. He contributed a lot for the establishment of Astanga Ayurved College in Calcutta. He also prepared a bunch of pupils including Kaviraja Jamini Bhushan Ray, Kaviraja Bidhubhushan Sen (of Patna), Kaviraja Birjacharan Gupta (author of Banaushadhi Darpan). These were some of the many noteworthy.



Figure 5: Kaviraja Bijayratna Sen

Kaviraja Chandrakishore Sen

In 1878, Chandrakishore Sen, a Kaviraja of the traditional Srikhandha School and a junior contemporary of Kaviraja

Gangadhara Ray, opened a dispensary in Calcutta with the idea of selling prepared medicines at cheaper rates. Moreover, in 1898, success in this direction led him to undertake large-scale production by shifting the dispensary to Kalutola. He was inspired to undertake large-scale production by the pharmaceutical concern founded in 1884, to manufacture and sell Ayurvedic drugs. The Company was named as C. K. Sen and Co. Private Limited, Calcutta. Similar efforts were made to commercialize Ayurvedic drugs. In addition, he published inexpensive books to propagate the knowledge of Ayurveda and to highlight its scientific essentials.

Kaviraja Jogindranath Sen (1871–1918)

He was the son of Kaviaraja Dwarkanath Sen and a great scholar of Ayurveda from Bengal school [Figure 6]. He learned Ayurveda from Sanskrit College and Calcutta Medical College. He started his journey as a Royal Physician of Nepal. For easy understanding of Charaka Samhita, he wrote Charakaposthara commentary on Charaka Samhita. He was a famous teacher of Ayurveda and made many scholars like Jotish Chandra Chakraborty, C. Dwaraknath, and others. He headed Ayurveda Mahasammelana four times. Acknowledging his achievement and contributions, he had crowned as Vaidyaratna in 1916.



Figure 6: Kaviraja Jogindranath Sen

Kaviraja Jamini Bhushan Ray (1879–1925)

Born in Khulna, Bengal in 1879 [Figure 7]. His father, Kaviraja Panchanan Ray was a Prolific Sanskrit Scholar and an Ayurvedic physician at Bhwonipur, Calcutta. Kaviraja Jamini Bhushan Ray did MB course from Calcutta Medical College and took MA degree in Sanskrit. He got primary lessons of Ayurveda from his father. Later, he learnt Ayurveda from Kaviraja Bijayratna Sen. He decided to practice Ayurveda and established Baidyaraj Pharmacy and dispensary in

Calcutta. He became well known for his treatment approaches across the country. However, his main goal was to establish an Ayurveda college in Calcutta to fulfill the wish of his mentor, Kaviraja Bijayratna Sen. In the year 1916, he established Ashtanga Ayurved College in Calcutta. He was the first principal of the college. Mahatma Gandhi laid down the foundation stone of the new hospital building of this college on 5th May 1925. He wrote many books like *Shalakyatantra*, *Prasutitantra*, *Vishatantra*, and others. He had donated all his properties for the foundation of Ashtanga Ayurved College.



Figure 7: Kaviraja Jamini Bhushan Ray

Kaviraja Shyamadas Bachaspati (1876–1934)

He was from a Kaviraja family of Chupigram, Burdwan District, Bengal [Figure 8]. His father Kaviraja Jagannath Prasad Das was a popular Ayurvedic physician. He took primary Sanskrit lessons from his father, later went to Kashi, and learnt Ayurveda from the famous Paresh Kaviraja. He came to Calcutta and started Ayurveda practice with Kaviraja Dwarakanath Sen. Later, he started his own dispensary. He used to teach students in his dispensary. From all over the country, students used to come to him for learning Ayurveda. Kaviraja Bijaykali Bhattacharya and Kaviraja Ramchandra Mallik were some of the famous students. He established Vidyashastra Peeth on the request of the great freedom fighter Deshbandhu Chittaranjan Das in the year 1921. The institute was later renamed as Shyamadas Vaidya Shastra Peeth and is now running as the Institute of Post-Graduate Ayurvedic Education and Research.

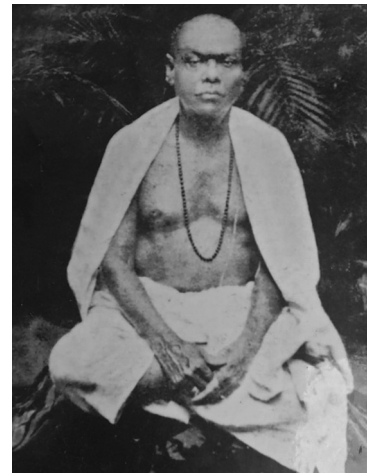


Figure 8: Kaviraja Shyamadas Bachaspati

Kaviraja Gananath Sen (1877–1944)

He was born in Varanasi [Figure 9]. He belonged to a family of Ayurveda physicians. His father Kaviraja Bishwanath Sen was a popular Ayurvedic physician. He took a degree in modern medicine. Later, he learnt Ayurveda from Kaviraja Jaynarayan Gupta. He started his Ayurvedic dispensary at Sutanuti, Calcutta. He was an Ayurvedic physician with a modern mind. He started an Ayurvedic pharmacy, Kalpataru Ayurvedic Works at Jorasanko, Calcutta, where Ayurvedic medicines were manufactured in tablet, capsule, and syrup forms, with attractive labeling and packaging. Those attempts were the first of its kind in India for Ayurveda. He established Biswanath Ayurveda Mahavidyalaya and Hospital in the memory of his father in 1932. Students were coming not only from India but also from abroad to learn Ayurveda from him. He wrote many books like *Pratyaksha Shariram*, *Siddhanta Nidanam*, and *Ayurveda Samhita*. He played an influential role in popularizing Ayurveda in the early 20th century.



Figure 9: Kaviraja Gananath Sen

Table 1: Ayurveda books published by Bengal Scholars

Author	Book/work	Language	Remarks
Kaviraj Gangadhar Ray	“Jalpa Kalpa Taru” commentary on Charaka Samhita	Sanskrit	
Kaviraj Jogindranath Sen	“Charakopaskara” commentary on Charaka Samhita	Sanskrit	
	Commentary on “Ayurved Dipika” of Chakradutta and “Jalpa Kalpa Taru” of Kaviraj Gangadhar Ray	Sanskrit	
Kaviraja Haranchandra Chakraborty	Sushrutartha Sandipana commentary on Sushruta Samhita	Sanskrit	
Kaviraja Bijayratna Sen	Commentary on Ashtanga Hridaya	Sanskrit	
Kaviraja Chandrakisore Sen	Ayurveda Samgraha	Bengali	These two are complete texts on Ayurveda and contain complete knowledge of Ashtanga Ayurveda including Dravyaguna and Bhaishajya Kalpana which are also available nowadays
Kaviraja Amritlal Gupta	Ayurveda Shiksha	Bengali	
Kaviraja Binodlal Sengupta	Ayurveda Vijyana (part - I and II)	Bengali	This book includes all the branches of Ayurveda published in 1887
	Ayurvediya Dravyabhidhana	Bengali	A book on Dravyaguna, which include a large number of plants published in 1876
Kaviraja Birjacharan Gupta	Banaushadhi Darpana (part - I and II)	Bengali	The first part was published in 1908 and the second part was in 1909
Gobinda Sen	Vaidyaka Paribhasha Pradeep	Sanskrit	Published in 1906
Prankrishna Kaviraja	Pranakrishna Oushadhavali	Bengali	
Mrityunjoy Kaviraja	Mrityunjay Oushadhavali	Bengali	
Ramchandra Vidyavinod	Ayurveda Sopana	Bengali	
Shital Chandra Chattopadhyay	Swayatwa Chikitsa	Bengali	
Avinasa Candra Kaviratna	Caraka Samhita (English translation)	English	
Umesh Candra Dutta	Materia Medica of the Hindus	English	It was a translation of Sanskrit materia medica into English, it was published in 1877
Bhudeb Mukherjee	Rasa Jala Nidhi (part - I to V)	English	A complete text on Rasashastra, five parts were published between 1926-1938
Umesh Chandra Gupta	Vaidvaka Shabda Sindhu	Sanskrit to English	The Medical Sanskrit dictionary was published in 1894

PUBLICATIONS

There was a scarcity of Ayurvedic texts during the 18th and 19th centuries. Many Ayurvedic texts were destroyed by the Muslim rulers, many texts were missing due to lack of preservation, and many texts were unavailable due to lack of publication. For that reason, the scholars from Bengal thought to publish the ancient Ayurvedic texts, write a commentary on Vrihadtrayi, and write Ayurvedic books in Sanskrit, Bengali, and even in English languages. These efforts helped to overcome the lack of Ayurvedic texts and to understand Ayurveda better [Table 1].^[8]

AYURVEDIC EDUCATION IN BENGAL

The Ayurvedic education was then continued as Guru-Shishya school. It faced the toughest hurdle after the establishment of the English Education Act in the year 1835. All the funds were blocked, publications were stopped, and systematic education was abolished. At that time, the great Ayurvedic scholars tried to continue Ayurvedic education. They arranged teaching facilities for the willing students at their own residence. Those arrangements were called “Tol” or “Chatuspathi.” The teaching, lodging, and food for the students

were completely free. Some interested landlords had extended support to the Ayurvedic scholars to run those schools. In those schools (Tol), Ayurvedic education was alive until the establishment of Ayurvedic teaching institutes in 1916. This type of schools were present all over Bengal, especially in Murshidabad, Calcutta, Birbhum, Burdwan, Dhaka, Bikrampur, Rajshahi, and Nabadwip. The Calcutta Review reported in 1842 that in Calcutta, the number of Tol was 190. In each Tol, there were about 15 students. The age of students was between 16 and 24 years.^[9] Apart from these Tol, Ayurveda was also taught in the Ayurvedic dispensaries. The Ayurvedic Aushadhalaya played an important role in the propagation of Ayurvedic knowledge to the disciples.

An attempt was taken in 1823 for systematic education of Indigenous systems of medicine in India (Ayurveda and Unani). The indigenous systems of medicine course of 2 years duration were started in the Government Sanskrit College in 1827 in Calcutta. The Government Sanskrit College was established in 1824. However, in the year 1833, the classes of Indigenous systems of medicine in the Sanskrit College were abolished.^[2] At the same time, a “Baidya Samaj” (Physician's society)

was established in 1831 by Kaviraja Kshudiram Bisharad to help the Kaviraja to get acquainted with Ayurvedic drugs and properties of many plants and herbs used in the preparation of Ayurvedic medicine.^[10] The first Ayurvedic college, the Calcutta Ayurvedic Institution and Pharmacy was established in 1905, by Surendra Nath Goswami.

J. B. Roy State Ayurvedic Medical College and Hospital

Kaviraja Jamini Bhushan Roy established Ashtanga Ayurveda Vidyalaya on February 10, 1916. The institute was first started in a rented house at 29, Fariapukur Road, Shyambazar, Calcutta. Kaviraja Jamini Bhushan Roy was the first principal of this institute and Kaviraja Birajacharan Gupta was the Vice-Principal. The institute started with only 18 students. However, in a very short period, the institute gained popularity. In the year 1922, the institute had students from various parts of India such as Delhi, Bombay, Lahore, Madras, Kashmir, Travancore, and others. The institute even got students from Nepal and Sri Lanka. The institute was registered under Society Act on March 5, 1919. Later in 1925, the institute was shifted to its present address, 170–172, Raja Dinendra Street, Shyambazar, Calcutta. The founding stone for the new building was laid by Mahatma Gandhi on May 6, 1925. For this reason, the institute is still known as Gandhi Hospital amongst the local people. Kaviraja Jamini Bhushan Roy died in 1926 at the age of 47 years. In the year 1940, the institute was renamed Jamini Bhushan Ashtanga Ayurveda Vidyalaya O Ayurvediya Arogyashala. Later the institute became familiar as J. B. Roy State Ayurvedic Medical College and Hospital, which is the oldest existing Ayurvedic institute in India.

Shyamadas Vaidyashastra Peeth

During the period of the noncooperation movement, Kaviraja Shyamadas Bachaspati, an eminent Ayurvedic physician of his time established Vaidyashastra Peeth at Farbes Manson, Wallington Square, Calcutta, on request of the famous freedom fighter Deshbandhu Chittaranjan Das in the year 1921. Later, the institute was shifted to 68, Balaram Dey Street, Calcutta; and the classes were started on July 1, 1921. Every year, 20 students from different parts of the country took admission to this institute. Kaviraja Shyamadas Bachaspati was the first principal of this institute. He donated Rs. 200,000/- for a permanent building of this institute. The institute was again shifted to Vivekananda Road, Calcutta in 1933. A six bedded hospital was also started here. Later, Netaji Subhas Chandra Bose and Sarat Chandra Bose arranged land at 294/3/1, Upper Circular Road, Calcutta, from Calcutta Municipality for the permanent building of this institute. Kaviraja Shyamadas Bachaspati

died in the year 1934; after that, Kaviraja Bimalananda Tarkatirtha, son of Kaviraja Shyamadas Bachaspati took the charge of this institute. The institute was renamed as Shyamadas Vaidyashastra Peeth Parishad. Bir Bikram Kishore Manikya Bahadur, Maharaja of Tripura, laid down the foundation stone of the building at the present address. A three-storied building was established, and a 75-bedded hospital was started in 1935. The pharmacy of this institute “Nagarjuna Rasashala” was inaugurated by Shri Sarvapalli Radhakrishnan in 1939. The present name of this institute is the Institute of Post-Graduate Ayurvedic Education and Research at Shyamadas Vaidyashastra Peeth. This is the only postgraduate Ayurvedic institute in West Bengal.

In addition, a national university of Bengal, Gaudiya Sarvavidyayatana, was established in 1921 as part of the noncooperation movement, with an Ayurvedic medical wing.^[12]

Gobinda Sundari Ayurveda College and Hospital

This Ayurvedic institute was established in the year 1929 at 20, Ramkanta Bose Lane, Baghbazar, Calcutta. Maharaj Manindra Chandra Nandi, Maharaja of Cossimbazar, founded this institute in tribute to her mother Gobinda Sundari. Kaviraja Ramchandra Mallik was the principal of this institute. The institute was shifted to 16/2, Ramkanta Bose Lane, in a big building. A 60-bedded indoor department was started in 1940. It had specialization in Kayachikitsa, Shalyatantra, Shalakyatantra, and Prasutitantra departments. Students were coming from the various parts of India such as Tejpur, Patna, Puri, Rajshahi, and others. The institute had its own pharmacy. Ayurvedic medicines were prepared in this pharmacy. The institute was closed in the year 1942 due to a lack of funds and financial support.

Bishwanath Ayurveda Mahavidyalaya and Hospital

This institute was established by Kaviraja Gananath Sen in memory of his father Kaviraja Bishwanath Sen, on July 10, 1932. He donated Rs. 100,000/- for the development of the building for this institute. The out-patient department was opened in 1932 and the in-patient department was opened in 1933. It was a 50-bedded hospital; with 28 beds for male patients and 22 beds for female patients. The hospital had *Kayachikitsa*, *Shalyatantra*, *Prasutitantra*, and *Chakshu roga* departments. The institute had separate pathology, pharmacy, library, and museum. The institute had issued Ayurveda Tirtha and Member of the Ayurvedic State Faculty degree to the students. At present, this institute is running as an Ayurvedic pharmacy college and hospital.

Ayurvediya Pratisthana, Calcutta

This institute was established by Kaviraja Naliniranjan Sen at 123, Harish Mukherjee Road, Bhwanipur, Calcutta, in 1935. He was the first principal of this institute. The institute offered Ayurveda Tirtha degree to the students. After the death of Kaviraja Naliniranjan Sen, his son, Kaviraja Shibrangan Sen took the charge of the Principal of this institute. The institute was closed down within a short period.

Raghunath Ayurved Mahavidyalaya, Contai

Kaviraja Raghunath Maity formed a society, Ayurved Sevak Sangha, with the support of local people at Contai, Midnapur District, in 1944. The Society decided to run an Ayurved institute for Ayurvedic treatment and teaching. Local people donated land for the construction of buildings and money for running the institute. The institute was started with different departments such as hospital outpatient department, Teaching, Pharmacy, Herbal Garden, and others. Kaviraja Raghunath Maity was the first principal of this institute. The institute offered Ayurveda Tirtha degree to the students. Apart from Bengal, students were coming from Bihar, Orissa, and Tripura state for studying Ayurveda in this Institute. Students got free tuition, boarding, and lodging here, the institute bore all the expenses. In the year 1975, the institute was renamed as Raghunath Ayurved Mahavidyalaya. The institute is still running as an Ayurvedic college and hospital.

Apart from these institutes, some other institutes were also established in Bengal namely Dhaka Ayurved Vidyalaya, Chattagram Ayurved Vidyalaya, Barishal Ayurved Vidyalaya, Gaila Kavindra Ayurveda College, Savar Monmohan Ayurved Chatushpathi for endowing Ayurvedic knowledge to the interested students. Students used to come not only from various parts of India but also

from neighboring countries. The institutes were carrying the glory of Ayurveda in colonial India [Table 2].

AYURVEDIC DISPENSARIES

In colonial India, Ayurvedic physicians used to attend the patients on-call basis. In general, the rich patient used to call the physicians, and then the physicians used to visit the place of the patients for treatment. Based on the examination, the Ayurvedic medicines used to prescribe charges were used to calculate. Few Ayurvedic physicians had their own clinics. There were a few free Ayurvedic treatment centers and dispensaries also, where needy and poor patients got free Ayurvedic treatment and medicines. Along with treatment, the physicians used to teach Ayurveda and medicine preparation to the interested ones. The dispensaries accommodated the disciples taking complete care of their food, clothes, and lodging. All these dispensaries treated poor patients free of cost and dispensed free Ayurvedic medicines. Few dispensaries are mentioned here.^[11]

Gangabishnu Mallik Datavya Chikitsalaya

It was established by Gangabishnu Mallik at Chorbagan, Calcutta in 1770. He had appointed a few Ayurvedic physicians for his dispensary. The physicians used to prepare Ayurvedic medicines and treat the patients.

Raja Rajendra Mallik Datavya Chikitsalaya

Raja Rajendra Mallik studied Ayurveda, who opened an Ayurvedic dispensary at Chorbagan, Calcutta.

Kaviraja Haricharan Ray Ayurvedic Aushadhalaya

This Ayurvedic dispensary was started by Kaviraja Haricharan Ray at 52, Guruprasad Chaudhury Lane, Thanthania, Calcutta.

Table 2: Ayurveda institutions

Name of the institution	Name of founder	Year of establishment	Current status	Remarks
Calcutta Ayurvedic Institution and Pharmacy	Surendra Nath Goswami	1905	Closed in a few years	It was one of the initial attempts by the revivalists of indigenous medicine
J. B. Roy State Ayurvedic Medical College and Hospital	Kaviraja Jamini Bhushan Roy	February 10, 1916	Running	Established as Ashtanga Ayurveda Vidyalaya and in 1940 renamed as "Jamini Bhushan Ashtanga Ayurveda Vidyalaya and Ayurvediya Arogyashala"
Institute of postgraduate Ayurvedic Education and Research	Kaviraja Shyamadas Bachaspati	1921	Running	Founded as Shyamadas Vaidyashastra Peeth. This is the only postgraduate Ayurvedic institute in West Bengal
Gobinda Sundari Ayurveda College and Hospital	Maharaj Manindra Chandra Nandi	1929	Closed in 1942	Maharaja of Cossimbazar founded this institute in tribute to her mother Gobinda Sundari
Bishwanath Ayurveda Mahavidyalaya and Hospital	Kaviraja Gananath Sen	July 10, 1932	Running	At present, this institute is running as an Ayurvedic pharmacy college and hospital
Ayurvediya Pratisthana, Calcutta	Kaviraja Naliniranjan Sen	1935	Closed within a short period	
Raghunath Ayurved Mahavidyalaya, Contai	Ayurved Sevak Sangha	1944	Running	Kaviraja Raghunath Maity formed Ayurved Sevak Sangha, with the support of local people in 1944

Balai Swastha Sadan

This Ayurvedic dispensary was established by the sons of Shree Balaichand Sen at 28/1, Haradhol Road, Ahiritola, Calcutta. Kaviraja Amritlal Gupta was the physician of this dispensary. This dispensary was run successfully for 12 years.

Haranath Ayurved Bhawan

It was established by Thakur Haranath at 54, Baratala Street, Barabazar, Calcutta in 1923. Kaviraja Indubhushan Sen was the Ayurvedic physician in this clinic. He was famous for the treatment of chronic and difficult diseases.

Girishchandra Mitra Databya Oushadhalaya

This clinic was founded by Narendranath Mitra and Manmathanath Mitra in memory of their father Girishchandra Mitra. Two Ayurvedic physicians were appointed for treatment. A team constituted of famous Ayurvedic physicians of that time used to inspect this clinic every 3 months interval for proper management.

Gangadhar Ayurvediya Databya Chikitsalaya

It was established by a trust in the memory of Kaviraja Gangadhar Ray at Saidabad, Murshidabad District, West Bengal. This dispensary is still running.

Sreerampur Ayurveda Databya Chikitsalaya

Kaviraja Rajendra Narayan Sen was a popular Ayurvedic physician of that time in Calcutta. He established this clinic in his native village Sreerampur, Murshidabad District.

Murshidabad Databya Ayurvediya Chikitsalaya

Pandit Abinash Chandra Kabya Puranatirtha established this clinic in Murshidabad District.

Chandannagar Databya Ayurvediya Chikitsalaya

It was established by an Ayurveda lover, Durgadas Rakshit at Chandannagar, Hoogly District. He bore all the expenses of this dispensary. Kaviraja Ramhari Pal was the chief physician; Kaviraja Krishna Chandra Gupta was his deputy.

Chuchura Databya Ayurvediya Chikitsalaya

It was founded by another Ayurveda lover, Chandicharan Laha at Chuchura, Hoogly District. Kaviraja Prafulla Kumar Sengupta was the physician.

Naptipara Ayurvediya Databya Chikitsalaya

Author Bhudeb Mukhopadhyay established this clinic at Naptipara village, Khanakul, Hoogly District, in memory

of his father Bishwanath Tarkabhushana on January 6, 1894. He donated Rs. 26,000/- for running this clinic.

Tarakeswar temple estate Ayurvediya Databya Chikitsalaya

The trustee board of the famous Tarakeswar temple established a free Ayurvedic clinic on the temple premises. The clinic is running till date.

Tiluri Jagabandhu Ayurveda Vidyalaya and Oushadhalaya

Two brothers, Maheswar Ray and Srikantha Ray founded this institute in the memory of their father, Jagabandhu Ray, at Tiluri village, Bankura District. Kaviraja Ramdurlava Sen was the chief Ayurvedic physician of this institute.

Lalit Mohan Ayurvediya Databya Chikitsalaya

Landlord Lalit Mohan Singharay founded this Ayurvedic clinic at Chakdighi village, Burdwan District. He appointed Ayurvedic physicians to run this clinic. The physicians used to prepare Ayurvedic medicines for distribution.

Chupi Annadaprasad Ayurvediya Databya Chikitsalaya

Famous Ayurvedic physician Kaviraja Shyamadas Vachaspati established this dispensary at his native village Chupi, near Purbasthali, Burdwan District in the memory of his father Annadaprasad. This dispensary is still running.

Ayurvediya Databya Chikitsalaya

Jessore District

Landlord Rajkumar Ray founded one free Ayurvedic clinic at Narail village, Jessore District. Patients were served with free Ayurvedic treatment and medicines from this clinic.

Dubalhari village in Rajshahi District

This dispensary was established by Landlord Haranath Ray and his son Ghanadanath Ray at Dubalhari village, Rajshahi District.

Karmachariya village, Rajshahi District

Landlord Rajkumar Sarkar founded another free Ayurvedic clinic at Karmachariya village, Rajshahi District.

Dhaka District

Kaviraja Girish Chandra Sen had started a dispensary in his residence in Dhaka District. He learnt Ayurveda from Kaviraja Durgaprasad Dasgupta. He prepared Ayurvedic medicines by own.

Faridpur District

Landlord Nishikanta Bandopadhyay Chaudhury established a free Ayurvedic clinic in his home at Bikrampur, Faridpur District. After his death, his son Landlord Bhavarajan Bandopadhyay Chaudhury took the charge. Every kind of patients including even cholera and pox were treated with Ayurvedic medicines in this clinic. All the expenses of this clinic were borne by the family for public service.

Coochbihar District

The king of the Coochbihar estate established one free Ayurvedic dispensary in his estate. Patients used to get free Ayurvedic treatment and medicines from this clinic.

There was an herbal garden adjacent to this clinic. The clinic is still running.

AYURVEDIC PHARMACIES IN BENGAL

The large-scale manufacturer of Ayurvedic medicine became essential as the availability of Western medicines was abundant in the market. Vaidya Zandu Bhatta of Jamnagar was the first Ayurvedic physician who worked in this direction and established Zandu Rasashala at Jamnagar in 1860. It was engaged in preparing Ayurvedic medicines on large scale and used to sell these medicines to the hospitals of Navanagar State and other Ayurvedic physicians.^[8] In Bengal also, many small and medium-scale manufacturing units were established

Table 3: Ayurvedic pharmacies in Bengal

Name of the dispensary	Name of founder	Year of establishment	Remarks
Haran Ayurvedic Aushadhalaya	Kaviraj Haran Chandra Mukherjee	1865	It was established in rural Bengal at Gelegram, Bankura District
Mayapur Ayurveda Aushadhalaya	Kaviraj Rampada Banerjee	1868	<i>Mayapur rasayana</i> was a famous formulation of this company
Adi Ayurvediya Aushadhalaya	Kaviraj Binodlal Sen and Kaviraj Asutosh Sen	1871	<i>Ashwagandha rasayana</i> was a famous formulation
CK Sen and Company Private Limited	Kaviraj Chandra Kishore Sen	1878	<i>Jabakusum taila</i> , <i>Somlatarishta</i> , <i>Dashanakanti churna</i> , and <i>Sanjivana rasayana</i> were some of the popular formulations of this company
Gangaprasad Adi Ayurvediya Aushadhalaya	Kaviraja Nilambar Sen father of Gangaprasad Sen	1880	Famous medicine was <i>Kanaka kanti taila</i>
NN Sen and Company Private Limited	Kaviraj Nagendranath Sen	1884	This company exported Ayurvedic medicines on those days
Dabur Limited	Mr. SK Barman	1884	This company established a research unit at Rasbihari Avenue, Calcutta in 1919
Bengal Chemical and Pharmaceutical Works	Acharya Prafulla Chandra Ray	1894	At that time, the company manufactured 300 types of Ayurvedic medicines
Shakti Aushadhalaya	Mr. Mathura Mohan Chakraborty	1901	This company is still running in Bangladesh as a Government undertaking with 37 branches all over the country
Sadhana Aushadhalaya	Jogesh Chandra Ghosh	1914	The company had a total of 68 branches. It had distributing agencies in different countries, even in China, North America, and Africa
Kalpataru Ayurvedic Works	Mahamohapadhyay Gananath Sen	1914	Ayurvedic medicines were manufactured in tablet, capsule, and syrup forms, with attractive labeling and packaging
Shree Baidyanath Ayurved Bhawan Privet Limited	Kaviraja Ramdayal Joshi	1917	Kabjhar, Surakta, Memori, Jakamo, and others were some of the famous proprietary Ayurvedic formulations. At present, it is one of the leading Ayurvedic medicines manufacturing units in India
Dhaka Ayurvedic Pharmacy	Run by famous Kaviraja of Dhaka	1919	<i>Mritasanjibani sudha</i> , <i>Makaradwaja</i> , <i>Chyavanprasha</i> , <i>Ashokarishta</i> , and <i>Jwarakeshari rasa</i> were some of the popular medicines
Gour Nitai Ayurved Aushadhalaya	Shri Gournitai Saha	1919	<i>Gourkanti salsa</i> , <i>Gourmetai modak</i> , <i>Krimikulantaka batika</i> , <i>Shwashari batika</i> , <i>Sarvajwaragajasimha</i> , <i>Sarvadadruhutashana</i> , <i>Kandudavanala</i> were some of the popular proprietary medicines
Ayurved Mahamandal Company Limited	Run by a Board of Directors headed by SN Basu, Upendra Kumar Mitra, Satis Chandra Ghosh, Jogindralal Raychaudhary, and Nalini Chandra Saha	1919	The medicines were prepared under the supervision of Kaviraj Surendranath Dasgupta and Kaviraj Jogindranath Shastri

for manufacturing Ayurvedic drugs between 1865 and 1935 [Table 3].^[12]

Haran Ayurvedic Aushadhalaya

It was the first Ayurvedic drugs manufacturing unit in rural Bengal. It was established by Kaviraj Haran Chandra Mukherjee in 1865 at Gelegram, Bankura District, West Bengal. Haran Kaviraja had a great reputation throughout Bengal. In a short period, this pharmacy became so famous that a branch office was opened at 118, Upper Chitpur Road, Calcutta. The plant drugs were collected from nearby jungles, and the medicines were manufactured by pure Ayurvedic methods. Mostly classical Ayurvedic medicines were manufactured in this unit along with some proprietary Ayurvedic medicines namely *Amlahara*, *Rativijaya Modaka*, and others.

Mayapur Ayurveda Aushadhalaya

It was founded by Kaviraj Rampada Banerjee in 1868 at 46, Sasthitala Road, Narikeldanga, Calcutta. This company did business successfully for the next 50 years. *Mayapur Rasayana* was a famous formulation of this company, it was given for all types of weaknesses.

Adi Ayurvediya Aushadhalaya

It was established by Kaviraj Binodlal Sen and Kaviraj Asutosh Sen in 1871 in Calcutta. *Ashwagandha Rasayana* was one of the famous formulations of this company.

C. K. Sen and Company Private Limited

This famous company was founded by Kaviraj Chandra Kishore Sen in 1878 at Kalighat, Calcutta. His idea was to propagate genuine Ayurvedic medicines in commercial lines. The second campus of this company was established at Kalutola, Calcutta. In the year 1911, the total investment of this company was Rs. 240,000/- *Jabakusum taila*, *Somlatarishta*, *Dashanakanti churna*, and *Sanjivana rasayana* were some of the popular formulations of this company. *Jabakusum* hair oil was the first to publish an advertisement in the Bengal Gazette.^[13]

Gangaprasad Adi Ayurvediya Aushadhalaya

Probably, this was the first large-scale manufacturing unit of Ayurvedic medicines in colonial India. It was initiated earlier by the father of Gangaprasad Sen, Kaviraja Nilambar Sen in Dacca. He introduced the Ayurvedic method of large-scale manufacturing of Ayurvedic medicines. "*Nilambarer Bari*" was a well-known medicine in Dacca. Adi Ayurvediya Aushadhalaya was founded by Kaviraj Gangaprasad Sen in 1880 at Kumartully, Calcutta. Many Ayurvedic medicines were prepared in this pharmacy, one famous medicine was *Kanaka kanti*

taila. The reputation of this company was extended to other provinces of India, even to Europe and America.^[12]

N. N. Sen and Company Private Limited

It was established by Kaviraj Nagendranath Sen in 1884 at 18/1-19, Lower Chitpur Road, Calcutta. He was a member of the Chemical Society, Paris and USA, and the Surgical Aid Society, London. The formulations of the company became popular in a short period. This company exported Ayurvedic medicines on those days.

Dabur Limited

Mr. S. K. Barman established Dabur Limited in Calcutta in the year 1884. This company established a research unit at Rasbihari Avenue, Calcutta in 1919. The company expanded further with new manufacturing units at Narendrapur and Daburgram, West Bengal in 1920. *Chyavanprasha* and *Keshraj taila* were some of the famous Ayurvedic formulations of this company in the initial stages. At present, it is one of the leading Ayurvedic drug manufacturing companies.

Bengal chemical and pharmaceutical works

Acharya Prafulla Chandra Ray founded Bengal Chemical and Pharmaceutical Works in 1894 at 91, Upper Circular Road, Calcutta. He appointed experienced Ayurvedic physicians and chemists for manufacturing quality products. He prepared medicines for malaria, asthma, diabetes mellitus, liver diseases, and diarrhea from Ayurvedic medicinal plants. In 1901–1902, the annual income of the company was Rs. 25,371/-; in 1915–1916, it was increased to Rs. 513,529/-. At that time, the company manufactured 300 types of Ayurvedic medicines. *Ashokarishta*, *Vasaka Syrup*, *Kalmegh kwatha*, and *Punarnava kwatha* were some of the famous preparations. This company is still running with glory.

Shakti Aushadhalaya

Shakti Aushadhalaya was established by Mr. Mathura Mohan Chakraborty in 1901 at Patuatuli, Dhaka. The company started the journey with two famous Ayurvedic formulations i.e., *Chyavanprasha* and *Swarna sindura*. Medicines were prepared from plant drugs as well as from metal, and mineral drugs. The main objective behind the establishment of this company was to supply quality Ayurvedic medicines at a cheap rate. Mr. Chakraborty had started an Ayurvedic institute (Tol) attached to this manufacturing unit to popularize Ayurvedic knowledge. Ayurveda and Philosophy were taught in Sanskrit, and students were offered free tuition, boarding, and lodging. This company is still running in Bangladesh as a Government undertaking with 37 branches all over the country.

Sadhana Aushadhalaya

It was established in the year 1914 at 21, Dinanath Sen Road, Gandaria, Dhaka by Jogesh Chandra Ghosh. He graduated from Coochbehar College in Chemistry; took a master's degree in chemistry from Calcutta University; he was a fellow of the Royal Society of Chemistry and the American Chemical Society. He was a professor of chemistry at Bhagalpur College and Jagannath College, Dhaka. He was a pupil of Acharya Prafulla Chandra Ray and was motivated by the works of Mr. Ray. He was attracted to Ayurveda and established this unit to use the indigenous heritage and knowledge. Once this Pharmacy manufactured 450 types of Ayurvedic medicines. It became popular in a very short period and had branches all over British India. *Mritasanjivani* and *Mahadraksharishta* were two popular preparations. The company had a total of 68 branches. It had distributing agencies in different countries, even in China, North America, and Africa.^[14]

Kalpataru Ayurvedic works

It was established by Mahamahapadhyay Gananath Sen in 1914 at Jorasanko, Calcutta, at a cost of Rs. 10,000/-. Ayurvedic medicines were manufactured in tablet, capsule, and syrup forms, with attractive labeling and packaging. Improved scientific methods of manufacturing and sophisticated machineries were adopted for a better quality of products. The products of his company were so popular that a second campus was established at Chittaranjan Avenue, Calcutta, at a price of Rs. 300,000/- by the name Kalpataru Prasad. *Chyavanprasha* and *Makaradwaja* were two notable products of this company.^[12]

Shree Baidyanath Ayurved Bhawan Privet Limited

Kaviraja Ramdayal Joshi established this famous Ayurvedic medicines manufacturing unit in Calcutta in the year 1917. Kaviraja Joshi had gathered several Kaviraja, the group of Kaviraja was involved in the manufacturing of medicines and running of dispensaries. The company initially prepared both classical as well as proprietary medicines. Kabjhar, Surakta, Memori, Jakamo, and others were some of the famous proprietary Ayurvedic formulations. At present, it is one of the leading Ayurvedic medicines manufacturing units in India.

Dhaka Ayurvedic pharmacy

It was established in Dhaka in the year 1919. It was run by some famous Kaviraja of Dhaka. It became a public company in 1920. Many Ayurveda-lover landlords invested money in the development of this company. The initial investment of this company was Rs. 20,000/-. In the year 1931, the company had more than 200 branches

all over India; and the capital increased to Rs. 500,000/-. *Mritasanjivani* Sudha, *Makaradwaja*, *Chwavanprasha*, *Ashokarishta*, and *Jwarakeshari Rasa* were some of the popular medicines of this company.

Gour Nitai Ayurved Aushadhalaya

It was founded by Shri Gournitai Saha at Barabazar, Dacca in 1919. The company prepared both classical as well as proprietary Ayurvedic medicines. *Gourkanti salsa*, *Gournetai modak*, *Krimikulantaka batika*, *Shwashari batika*, *Sarvajwaragajasimha*, *Sarvadadruhutashana*, *Kandudavanala* were some of the popular proprietary medicines of this company.

Ayurved Mahamandal Company Limited

The then Ayurvedic manufacturing units were small in size and capacity, and the outrun was also meager. The need of that time was to establish a unit with more capital, extend business and maximize production. With these views, this Ayurvedic company was established at 19, Grey Street, Calcutta in 1919 with an authorized capital of Rs. 50,000/-. It was run by a Board of Directors headed by S. N. Basu, Upendra Kumar Mitra, Satis Chandra Ghosh, Jogindralal Raychaudhary, and Nalini Chandra Saha. The medicines were prepared under the supervision of Kaviraj Surendranath Dasgupta and Kaviraj Jogindranath Shastri. A large variety of Ayurvedic medicines were prepared through ancient Ayurvedic methods, viz., *Biswanath taila*, *Sonitamrita salsa*, *Chandanprabhasava*, and others.

The Ayurvedic medicines manufactured in these manufacturing units were very popular in society and were qualitatively very good. At that time, these Ayurvedic medicines competed with allopathic medicines in the market. For example, Haran's *Rativijaya modaka* and Mayapur's *Mayapur Rasayana*, meant for the treatment of debility and impotence, competed with Smith Stanistreet's Hornby's No. 9 Pills; Ayurved Mahamandal *Sonitamrita salsa*, or *Avinash's Amritadi kashaya*, with Seigel's Syrup; and Mritunjay Halder's Swadeshi Quinine with imported quinines.^[12]

Many Ayurvedic preparations were then adopted by the allopathic system. At the beginning of the 20th century, many allopathic medicines were available in the market, which were taken from the Ayurvedic system and introduced into the allopathic system. For example, Oil Chalmogra, which was an Ayurvedic preparation for the treatment of skin diseases, was taken up by the allopathic chemists; *Kurchi* (*Holarrhena pubescens* Wall. ex G. Don) bark was used by the Ayurvedic physicians for the treatment of amoebic dysentery, had been included in the allopathic system by the name Kurchivine extract, *Kurchi Liquidum*; *Bael* (*Aegle marmelos* (L.) Corrêa) was

also included in the allopathic pharmacopoeia as Extract Baelae Liquid, Isoquino Bael.^[12]

RESEARCH WORKS

Kaviraja Mritunjay Halder of Kotwali, Malda District, invented Swadeshi quinine for the treatment of Malaria from indigenous medicinal plants. The action of this medicine was “in no way inferior to foreign quinine.” At that time, this medicine was displayed in the exhibitions held at Malda and Murshidabad and was highly appreciated for its intrinsic merit.^[12]

There started a difference of opinion between Ayurvedic and European physicians regarding the use of quinine in case of fever. Ayurvedic practitioners complained about the enlargement of the liver with prolonged use of quinine which was the mode of treatment for any kind of fever by western medical professionals. Bengali Ayurvedic magazine “Anubikshan” commented, “European physicians are using large doses of quinine and other European medicines for our ailments; that may have been beneficial for that moment but in the long run, destroy our health.”^[15]

Kaviraja Gananath Sen prepared injectable, aerosol, and rectal preparations from Indian medicinal plants. He had conducted clinical trials of those preparations and reported significant results of those trials.^[16]

MEDICINAL PLANTS TRADING

Medicinal plant trading existed earlier, but in the 19th century, this business had been given a new shape by Taraknath Sadhu. He had his centre for medicinal plants business at Barabazar, Calcutta. He had employed 15–16 persons for this business. He had collected medicinal plants from many sources even from distant areas. He used to supply medicinal plants to the Ayurvedic Aushadhalaya and the Ayurvedic physicians. This business was very profitable and this centre was a profitable concern throughout the 19th century.^[12]

FIGHT FOR EXISTENCE

The fight for the existence of Ayurvedic knowledge against British aggression for propagating western culture and allopathic medicine started under the leadership of Kaviraja Gangadhar Ray. Kaviraja Gangaprasad Sen and his students openly challenged Macauley’s theory of introducing English and wiping out Sanskrit or other indigenous languages. They defied the British and under Gangadhar’s leadership, set up traditional Ayurvedic treatment centres.

In 1868, Kaviraja Gangadhar used the Samvada Gnyanratnakara Press to print and publish

Jalpa-Kalpataru, a detailed Sanskrit commentary Charaka Samhita. By then, his batches of brilliant students depicted their competence as they studied Sanskrit texts and practiced ancient traditional Ayurvedic medicines. The areas around Pathuriaghata and Kumortuli in Calcutta became the places for Ayurveda medicine practice.^[17]

CONTRIBUTION IN FREEDOM FIGHT

The then-Ayurvedic scholars of Bengal also contributed directly to the freedom fight. Kaviraja Gangaprasad Sen became a supporter of the Swadeshi movement and gave rupees one lakh to bail out Yogesh Chandra Basu, editor of Bangabasi, who was arrested for writing and propagating anti-establishment ideas.^[17]

SUMMARY

Kaviraja Gangadhar Ray and Kaviraja Gangaprasad Sen may be considered as harbingers of the Ayurvedic Renaissance in India. If Kaviraja Gangadhar is considered as the Father of Ayurvedic education in modern India; then Kaviraja Gangaprasad should be considered as the Father of Ayurvedic practice in modern India.

During their initial years, the European doctors had to take help from the local Kaviraja to understand the diagnosis and treatments for diseases that were not in the least familiar to them. This was the late 18th century, and Calcutta was fast becoming a hub for settlements and trading activities. Open drains, marshy lands, mosquito-borne fevers, and the general lack of initiatives in the field of public health issues soon gave rise to an exorbitant mortality rate. Herein, European doctors cashed in the fear of diseases and started treating the rich and the elite for an expensive fee of one gold coin per visit. Soon, western medicine started picking up in popularity among the elite and the Kaviraja were often held guilty of deaths caused by administering Ayurvedic potions. The colonial government held the opinion that western medicine was more scientific and sophisticated. The Ayurveda Renaissance changed the course of this school of thought. Kaviraja Gangadhar, Kaviraja Gangaprasad, and their students elevated Ayurvedic medicines to the same stature as allopathic medicine and attracted public interest to it in a way that brought back faith to the age-old science of Ayurveda. Kaviraja Dwarakanath, Kaviraja Bijoyratna and others continued the works of their teachers in popularizing Ayurveda and encouraged the cooperation of traditional and western medical system.

The Ayurvedic scholars of Bengal had spread and popularised Ayurveda all over the country, especially in North India. Students from all over India used to

come to the Ayurveda Guru in Bengal for learning Ayurveda. The disciples of Kaviraja Gangadhar Ray established themselves in different parts of the country and started their dispensaries. Gradually, Ayurveda became popular in those places. The Kashi school of Ayurveda had been developed by the leadership of Kaviraja Pareshnath Sen (Paresh Kaviraja), one direct disciple of Kaviraja Gangadhar. Later, his nephew Kaviraja Dharmadas and his disciples Pandit Satyanarayan Shastri, Pandit Rajeshwardatta Shastri, and others got the flag and bore it successfully. Kaviraja Hariranjana Majumder disciple of Kaviraja Gangadhar, Kaviraja Umacharan Bhattacharya pupil of Kaviraja Dwarakanath, and others established Ayurveda School in Delhi. Kaviraja Ganendranath Sen, a disciple of Kaviraja Dwarakanath developed an Ayurveda school in Haridwar. Swami Lakshmiram and Swami Jayramdas, disciples of Kaviraja Dwarakanath established an Ayurveda school in Jaipur.^[6] These are some examples. Many other scholars learned Ayurveda from the Ayurveda Guru of Bengal and established themselves in different parts of the country, and protected and popularised Ayurveda in colonial India.

The diminished Ayurvedic education and practice got momentum during the Swadeshi movement in 1905.^[15] The time was to refuse foreign products and support the use of indigenous goods. The renowned leaders appealed to the people for using indigenous products manufactured in India and preferred refusing foreign goods. Leaders like Deshbandhu Chittaranjan Das wanted to bring the past glory of Ayurveda. He approached Kaviraja Shyamadas Vachaspati to establish an Ayurvedic institute for rendering pure Ayurvedic knowledge to the students. Netaji Subhash Chandra Bose arranged land for that institute on behalf of Calcutta Municipality. As a result of this movement, Shyamadas Vidyashastra Peeth was established.

Ayurvedic physicians in Calcutta charged high fees from rich Bengalis and Europeans. Some physicians had their pharmacy. Once during the 19th century, Ayurvedic physicians were rich and renowned personalities in society. Some of the Ayurvedic physicians were amongst the richest in Bengal at that time. Chandrakishore Sen and Co., Nagendranath Sen and Co., Binodlal Sen and Co., and some of the Ayurvedic physicians at Kumartuli were counted amongst the richest in Calcutta.^[15] But at the same time, they opened and ran charitable dispensaries for the poor. They established Chatushpathi or Tol for free lodging, boarding, and learning for the students. Their motto was to conserve and popularise the Ayurvedic system of medicine.

There were three main centers of Ayurveda practice in Bengal during the 19th century, i.e., Murshidabad,

Calcutta, and Dhaka. The Murshidabad center was funded by the then Nawab of Murshidabad. The prominent scholar of this center was Kaviraja Gangadhar Ray. Students from all over India came to Murshidabad for learning Ayurveda from Kaviraja Gangadhar. Later Calcutta became the main centre, due to the development of Calcutta as the capital city and main business point of India. Many scholars like Kaviraja Gangaprasad Sen, Kaviraja Dwarakanath Sen, and others practiced Ayurveda with glory and took Ayurveda to a new high. At the same time, another center was developed in Dhaka. Kaviraja Nilambar Sen, father of Kaviraja Gangaprasad Sen was a renowned Ayurvedic physician of Dhaka. Savar region of Dhaka became famous for Ayurvedic treatment. Dhananjay Kaviraja, Kaviraja Gurucharan Dutta, and Kaviraja Rakhal Chandra Dutta were some of the great scholars from Savar, Dhaka.^[18]

There was a rich heritage of Ayurveda in Bengal even in colonial India. The Ayurvedic physicians in Bengal practiced the science in the society, protected the great science from British aggression, and prepared many followers to popularise the Ayurvedic system of medicine. Even today, Gangaprasad's house at 5, Kumartuli, stands as a testimony of the glorious past. Close by lies Bijayratna Bhavan in a dilapidated state, with the title of 'Mahamahopadhyay' peeping from the nameplate near the entrance [Figure 10]. This nameplate is a testimony of erstwhile Bengal's defiance against Macauley's propaganda who thought Indian vernacular languages were inadequate in providing modern higher education.^[17]



Figure 10: Nameplates

CONCLUSION

The British invasion of India affected Indian heritage, culture, and knowledge badly. The indigenous medical science, Ayurveda did not get relief from that invasion.

In colonial India, The Ayurvedic system of medicine was affected at worst. The Ayurvedic scholars, however, demoralized, never lost hope. The Ayurvedic scholars especially from Bengal lead from the front for the protection of traditional Ayurvedic knowledge in Colonial India. They protected the science, practiced it, and popularized it in its form. They also prepared the next generations for carrying the legacy. A renaissance had been initiated in the entire Bengal for flourishing the most ancient and glorious Ayurvedic medical system. Kaviraja Gangadhar Ray and Kaviraja Gangaprasad Sen were considered as a pioneer of that renaissance. They not only protected Ayurvedic knowledge from British aggression but also propagated the knowledge throughout the country. Their fight was not less in a true sense than freedom fighting.

The misery for Ayurveda started with the establishment of the English Education Act in 1835 and continued until the foundation of the Ayurvedic institutes during the early 20th century. During this period, the Ayurvedic scholars from Bengal were continuing the flow of Ayurveda by practicing the science in their dispensaries, preserving the knowledge by publishing and writing Ayurvedic texts, and propagating it by teaching to the students. Later on, the students spread all over the country, establishing themselves and popularizing Ayurveda across the country. This is the time to pay tribute to all such great Ayurveda scholars from Bengal for holding the legacy high during the colonial India period.

Acknowledgment

The author acknowledges timely help of Kaviraja Niketan Chakraborty and Dr. Biswajit Ghosh for providing information. The author also acknowledges contribution of Prof. Abichal Chattopadhyay and Dr. Pulak Kanti Kar for preparation of this manuscript. The author thanks to Mr. Shubham Nandi for editing the photographs.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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