

## AYURVEDA IN THE EIGHTEENTH AND NINETEENTH CENTURIES

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### ABSTRACT

The period of eighteenth and nineteenth centuries is considered as modern period. During this period India passed from medieval to modern age. This period witnessed a remarkable beginning of intellectual activities in India. A number of books on Ayurveda were written. Many British officials and physicians studied the Indian medicine and published their works. A new branch of history of Ayurveda was developed. Ayurvedic pharmacies on the lines of the pharmacies of modern medicine were started. A brief account of all these developments in the field of Ayurveda has been presented in this article.

The period of eighteenth and nineteenth centuries in India is considered by almost all scholars as modern period. This period is marked by political turmoil due to decline of Mughal empire and establishment of British rule. During this period India passed from medieval to modern age. The first century of British rule in India (1757-1858) witnessed a remarkable beginning of intellectual activities in this country. At the end of 15th century Portuguese arrived in India and along with them they brought European doctors.

The first Government Sanskrit College was started in 1824 at Calcutta and in 1827 the classes of Indigenous and Allopathic systems of medicine of two years duration were started there. In 1833 the classes of Indigenous and Allopathic systems of medicine in the Calcutta Sanskrit College and Madrassa were abolished and the medical college of Bengal with English medium was established in 1835 for European medicine. This was followed by Madras Medical School (1835), the Grant Medical College, Bombay (1845), Hyderabad

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Medical School (1846), King Edward Medical School, Indore (1848), Agra Medical School (1854), Amritsar Medical School (1864), Campbell Medical School, Calcutta (1873), Temple Medical School, Patna (1874), Orissa Medical School, Cuttack (1875), B. J. Medical School, Poona (1878), Ahmedabad Medical School (1879), Calcutta School of Medicine (1886), Christian Medical College, Ludhiana (1894) College of Surgeons and Physicians, Bengal (1895), Haffkine Institute of India, Bombay (1899) and Berry White Medical School, Dibrugarh (1900). In this way upto 19th century medical colleges were established all over the country. Modern theories about diseases were spreading Ayurveda was also influenced by all these changes.

Due to long Muslim rule for centuries, the Unani medicine was also fully established during this period. Ayurvedic physicians had started using many Unani drugs in their practice. In addition to Ahiphena (*Papaver somniferum* linn) and Bhaṅgā (*Cannabis sativa* linn) etc. of medieval period, the use of formulations containing Sankhiyā (arsenic) Kucala (*Strychnos nuxvomica* linn), Tamākhu (*Nicotana tobacum*) and Soraka (Potassium nitrate, salt petre) etc. was increased during this period. A number of new modes of preparations like Śerabat, Gulkand and Malham from Unani system of medicine and Acids from Allopathy

were also taken in Ayurveda, as included in Siddhabheṣajamaṇimālā of this period. Attempts were also made to assimilate new thoughts into Ayurveda such as, Dākṛarimatā-nusāra mūtrapariḱṣā (urine examination according to modern medicine) and other modern elements have been given in Nighaṅṭuratnākara (1867) and Bṛhannighaṅṭuratnākara (1891).

In this changing situation Kavi-rāja Gangādhara Roy (1798-1865) of Bengal gave a new direction to Ayurveda. Murshidabad became a great centre of Ayurvedic education. He trained a number of disciples, who propagated Ayurveda in the whole country with their sound knowledge, dedication and sincerity. Thereafter the teaching system of Ayurveda was changed during 1900 to 1925. The previous syllabus based on samhitās was changed to subjectwise, systematic examinations were conducted and integration of Ayurveda with modern medicine also took place.

A number of books on Ayurveda were written during 18th & 19th centuries. Some of these works are:

**A. The books belonging to 18th century :**

1. Ātānkatimirabhāskara of Balarāma of Varanasi. A great work composed in the beginning of the 18th century. Tea is added here as a new drug

2. 'Vaidya Vinoda' of Śankara Bhaṭṭa of Jaipur (1705).
  3. 'Śivatattvaratnākara' of Keladi Basavarāja (1709). It is an encyclopaedic work dealing with meteorology, astronomical ideas, longevity and perpetual bodily vigour, town planning, horticulture and allied aspects, Ayurveda, mercury and mercurial preparations, serpents and poisons, and veterinary science etc.
  4. 'Divyarasendrasāra' of Dhanapati (18th cent.).
  5. 'Vaidyāmṛta' of Narāyaṇa (18th cent.).
  6. 'Prayogāmṛta' of Vaidya Cintāmaṇī. A most extensive work on therapy composed in the 18th century.
  7. 'Rājāvallabha nighaṇṭu' of Rājāvallabha (18th cent.).
  8. Āyurvedaprakāśa of Mahādeva Upādhyāya (1713).
  9. Vaidyakasārasaṁgraha of Śrikanṭha Śāmbhu (1734).
  10. Yogatarāṅgiṇī of Trimalla (1751). A well known collection of recipes.
  11. Rājāvallabhīya Dravyagūṇa of Nārāyaṇa Dāsa (1760).
  12. Hikmatprakāśa of Mahādeva (1773). A work in Sanskrit on Unani medicine.
  13. Cikitsāsāgara of Baṭeśvara (1785) and
  14. Pāradakalpadruma of Ananta (1792) etc.
- B. The books belonging to 19th century :**
1. Ajīṇamañjarī or Amṛtatamañjarī of Kāśinātha or Kāśirāja or Kāśirāma (1811).
  2. Gūḍhaprakāśikā or Upakārasarā of Dinakara Jyotiṣī (1818).
  3. Dhāturatnamālā of Deva Dutta (1828).
  4. Cobacinīprakāśa, compiled under the auspices of the famous Ranjit Singh (1851). A monographic work on Copacinī (Sarasaparilla) as a remedy against syphilis and other diseases.
  5. Nighaṇṭuratnākara of Viṣṇu Vāsudeva Goḍbole (1867).
  6. Āyurvedīyadravyābhidhāna of K. B. Lāl Sengupta (1876). A work containing special collections in greater number for materia medica.
  7. Āyurveda Vijñāna (2 parts), of Kavirāja Vinodlāl Sengupta (1887).
  8. Bower manuscript (Nāvanītaka), found in 1890 by Col. H. Bower at Kachar in East Turkey.
  9. Bṛhannighaṇṭuratnākara of Dat-tārāma Caube (1891).

10. Nighṇṭusamgraha of Raghunāthaji Indrajī (1893).
11. Bhaiṣajyaratnāvalī of Govinda Dāsa (Calcutta, 1893). A collection of recipes, giving description of new diseases also, such as Vṛkkaroga (Kidney diseases) and Mastiṣkaroga (Brain diseases).
12. Vaidyakaśabdasinghu of Umeśa Candra Gupta (1894). A medical Sanskrit dictionary containing a collection of medical technical terms with explanations and numerous citations from the medical glossaries.
13. Siddhabheṣajamaṇimālā of Kṛṣṇarāma Bhaṭṭa (1896). A work containing many types of Unani preparations like Śarbat, Gulkand and Malham etc. and acids of modern medicine. New diseases like typhoid and pneumonia are named here as Mauktika Jwara and Gaurjari respectively. It also includes a number of special recipes like Amīra Rasa, Śītalaparpatī, Malla taila, Bhaṅgā vaṭaka, Khaskhasāvaleha, Samīrapannaga taila etc. and
14. Śaligrāma Nighaṇṭu. the last lexicon of Lālā Śaligrāma Vaiśya (1896) etc.

Apart from the above books, translations of Caraka Saṁhitā, Suśruta Saṁhitā, Aṣṭāṅghṛdaya, Mādhavanidāna and Śāraṅgadhara Saṁ-

hitā were published. A number of books on Ayurveda were written in English language also. Such as "Materia Medica of the Hindus" by Umeśa Candra Dutta (1877), a translation of Sanskrit materia medica into English, "A short History of Aryan medical science" by Sir Bhagwat Singh Jee (1896) and English translation of Caraka Saṁhitā by Avināśacandra Kaviratna etc. Sanskrit commentaries on ancient treatises were also written such as 'Jalpakaḷpataru' commentary on Caraka Saṁhitā by Kavirāja Gaṅgādhara Roy (1798-1865) and 'Carakopaskāra' commentary on Caraka Saṁhitā by Yogindranātha Sen (1871-1918) etc.

The Bengal Asiatic Society founded by Sir William Jones (1746-1794) in 1784 at Calcutta also played a leading and pioneering role in India towards developing and promoting scientific research and education in the field of oriental studies. Some of the British civilians educated in England became interested in Sanskrit literature including medical classics of India. Many British officials and physicians like Jones, Miller, Wilson, Royle and Wise etc. studied the ancient Indian medicine and published their works which are:

"The design of a treatise on the plants of India" by Jones (1789);

"Disquisitions in the history of medicine" devoting a section to the conditions of healing in Hindustan by

Miller (1811); "On the medical and surgical sciences of the Hindus" by Wilson (1823); "The antiquity and independent origin of Hindu medicine" Royle (1837); "A commentary on the Hindu system of medicine" by Wise (1845); "Thirty five years in the East" an autobiography by Honigberger (1852); "Medicine of the oriental Indians" by Renouard (1836), translated by C. G. Coornegys (1856); "Ancient and medieval India" by Mrs. Manning (1869); "In Mrs. Manning's Ancient and Medieval India" by Goldsutcker (1869) etc.

Many European and Indian botanists and scholars also worked on Indian medicinal plants during this period. Prominent among them are Jones (1794) who wrote "Botanical observations on select Indian plants" as one of the earliest contributions on this subject. This was followed by Fleming's "Catalogue of Indian medicinal plants" (1810); Ainslie's "Materia medica of the Hindustan" (1813); Roxburgh's "Flora Indica" (1820-32); O'shaughnessy's "The Bengal dispensatory and pharmacopoeia" (1841) and "The Bengal pharmacopoeia" (1844) dealing exclusively with the properties and uses of the indigenous drugs; Irvin's materia medica of Patna (1848); Waring's "Pharmacopoeia of India" (1868) establishing the values of indigenous medicinal products; Mohideen Sheriff's "Supplement to the pharmacopoeia of India" (1869)

adding very materially to the usefulness of the work; Hooker's "Flora of British India" (1875-94); Dutt's "The materia medica of the Hindu's" (1877) a translation of Sanskrit materia medica into English; Fluckiger and Henbury's "Pharmacographia" (1879); Sukharama Arjun's "Materia medica of western India" (1883); Dymock, Warden and Hooper's "Pharmacographia Indica" (1890-93); a most useful work on the chemical composition and pharmacological actions of the Indian medicinal plants; Watt's "Dictionary of the economic products of India" (1885-94), a monumental and very useful work in this field; Day's "Indigenous drugs of India" (1896) etc. These works helped classifying the indigenous drugs on the scientific lines and in solving the problem of identification of the controversial drugs of Ayurveda. The classification of the indigenous drugs made the work of the scientists very easy in the field of drug research.

### History of Ayurveda

History of medicine is not a new subject in Ayurveda. The ancient Ayurvedic texts give glimpses of history of Ayurveda. But, this subject remained for a long time as the most neglected branch of learning. Most of the Ayurvedic physicians became simple dispensers of drugs and gradually they lost interest in the historical aspect of Ayurveda. It was only after the founding of the Asiatic Society of Bengal in 1784 that,

interest for the Indian medicine was roused among English readers. A number of scholars and physicians studied the ancient Indian medicine and published their valuable works. The article of Wilson "On the medical and surgical sciences of the Hindus" (Oriental magazine, 1823) was one of the beginning attempts to attract the historians towards Ayurveda. The work in this direction was continued by British, German, French and Indian historians. They include Royle (1837), Wise (1845), Stanzler (1846), Webb (1853), Weber (1852), Brain (1858), Listard (1863), Daremberg (1867), Manning (1869), Goldstucker (1869), Hessler (1887), Schoroedar (1887) and Brendes (1891) etc. Indian physicians also became interested in history of medicine. Eduljee was the first Indian to write a book on history of medicine. Dr. Kunte and Dr. Bhagwat Singh Jee wrote on history of ancient medicine of India. Thus during nineteenth century a new branch of history of Ayurveda was developed and now it is taught as one of the subjects in the graduate and post graduate classes of Ayurveda.

### Pharmacy

Generally Ayurvedic physicians were preparing their own medicines for their patients. But around nineteenth century many small and big Ayurvedic pharmacies on the lines of the pharmacies of modern medicine were started at Jamnagar, Calcutta, Bombay and Dhaka etc. Vaidya

Zandu Bhaṭṭa of Jamnagar was the first Ayurvedic physician who worked in this direction and established Zandu Rasaśālā at Jamnagar in 1860. It was engaged in preparing the Ayurvedic medicines on the large scale and used to sell these medicines to the hospitals of Navanagar State and to other Ayurvedic physicians. This experiment was a success and later on more such Ayurvedic pharmacies viz. Śakti Auśadhālaya, Dhākā Ayurvediya Pharmacy, Sādhnā Auśadhālaya, Dhūtapāpeśvara of Panvel (Bombay), Zandu Pharmacy and Unjha Pharmacy of Gujarat, Sukhasancālaka Company of Haridāsa Vaidya of Mathura and Dabur (Dr. S. K. Burman) Pharmacy of Calcutta came into existence on commercial basis. Acharya Praphul Chandra Ray established 'The Bengal Chemical and Pharmaceutical Works' in 1900 A.D. where active principles of many indigenous drugs were extracted and Ayurvedic formulations were prepared and presented on modern lines, especially for the practitioners of modern medicine, which became popular among them.

In the beginning the Ayurvedic methods were used to prepare the medicine but, later on western technology was adopted. In this way the revolution set in the nineteenth century gave birth to the new class of commercial pharmacies, which changed the entire outlook and set up of Ayurvedic system.

It is now clear that the western science and nineteenth century have influenced the Ayurveda in every respect. Today the ways and means used either in respect of practice of Ayurveda or teaching in the college or research in the laboratory have

entirely changed in comparison to the ancient or medieval Ayurveda. This revolution, by the influence of western science and technology started in the nineteenth century is now taking a new shape in the twentieth century.

### IMPORTANT PERSONS OF THE 18th—19th CENTURY

#### BENGAL :

1. Rāma Sen (18th century).
2. Kavirāja Gaṅgādhara Roy (1798-1865).
3. Dwārkānātha Sen (1843-1906).
4. Hārāṇacandra Cakravarti (                      -1935).
5. Yogīndranātha Sen (1871-1918).
6. Kavirāja Śyāmadāsa Vācaspati (1876-1941).
7. Kavirāja Gaṅgāprasāda Sen.
8. Kavirāja Vijayarātna Sen (1858-1911).
9. Yāminībhūṣaṇa Ray (1879-1925).

#### UTTAR PRADESH :

10. Kavirāja Dharmadāsajī (1862-1935).

#### DELHI :

11. Kavirāja Harirañjana Majumdāra (1835-                      ).

#### RAJASTHAN :

12. Shri Kṛṣṇarāma Bhaṭṭa (1848-1877).

#### GUJARAT :

13. Jeevarāma Kālidāsa Śāstri.
14. Zandu Viṭṭhaljī Bhaṭṭa (1831-                      ).
15. H. H. Bhagvat Sinh Jee (1865-                      ).
16. Ācārya Yādvaḷī Trikamjī (1881-1956).

#### POONA :

17. Śankerdājī Śāstri Pade (1867-                      ).

#### KERALA :

18. P. S. Warriar (1869-                      ).
19. H. H. Kerala Vermā (1864-1944).

#### MADRAS :

20. Achanta Lakṣhmipathi (1880-1964).

## INCLUSION OF NEW DRUGS

1. Cāya (Tea) : It is added as a new drug in Ātāṅkatimirabāskara of 18th century.

In 19th century several other drugs of the modern period were included in the Indian materia medica, which are as follows :

2. Gānjā (Resinous leaves of Cannabis) : Bhaiṣajyaratnāvalī has incorporated it by the name of Saṁvida, as one of the medicines for relieving pain.
3. Isāfgola (*Plantago ovata*) : Included in Ayurveda Vijñāna as Śītabīja, in Siddhabheṣajamaṇimālā as Iswarabola and in Śāligrāma Nighaṇṭu as Isadgola.
4. Kālādānā (*Ipomoea hedracea*) : Included in Ayurveda Vijñāna as Śyāmabīja and in Siddhabheṣajamaṇimālā as Kālāṅjanikā.
5. Lāl mirch (Chillis) : Included as Kaṭuvīrā in Ayurveda Vijñāna as pittakāriṇī in Siddhabheṣajamaṇimālā and as Rakta marica in Śāligrāma Nighaṇṭu.
6. Mehndi (Henna) : Included in Siddhabheṣajamaṇimālā as Guccaughapūṣpa and in Śāligrāma Nighaṇṭu as Nakharanjaka.
7. Revandacīnī (Rhubard) : Included in Ayurveda Vijñāna and Śāligrāma Nighaṇṭu as Pitamūlī and in Siddhabheṣajamaṇimālā as Revatikā.
8. Tamākhu (Tobacco) : Included in Nighaṇṭuratnākara and Bṛhannighaṇṭu-ratnākara.

In addition to the above mentioned drugs many flowers, vegetables and fruits were also included in Ayurveda during the above period, which are as under :

**Flowers :**

1. Gendā (Merigold) : Included as Sahasra in Siddhabheṣajamaṇimālā and as Jhaṇṭuka in Śāligrāma Nighaṇṭu.
2. Gulāb (Rose) : Included as Śatapatrī in Ayurveda Vijñāna, Siddhabheṣajamaṇimālā and Śāligrāma Nighaṇṭu.

**Fruits :**

3. Amruda (Guava) : Included as Peruka in Śāligrāma Nighaṇṭu.
4. Anannāsa (Pine-apple) : Included in Śāligrāma Nighaṇṭu.
5. Kāju (Cashew) : Included in Siddhabheṣajamaṇimālā as Kājutaka.



6. Papatā (Papaya) : Included in Śāligrāma Nighaṇṭu as Eraṇḍacirbhaṭa.
7. Śarifā (Custard apple) : Included in Ayurveda Vijñāna, Siddhabheṣajamaṇimālā and Śāligrāma Nighaṇṭu as Gaṇḍagātra.

**Vegetables :**

8. Ālū (Potato) : Included in Śāligrāma Nighaṇṭu as Allūka.
9. Arvi (Colocasia) : Included in Ayurveda Vijñāna, Siddhabheṣajamaṇimālā and Śāligrāma Nighaṇṭu as Ālukī.
10. Bhiṇḍī (Lady's finger) : Included as Bhiṇḍā in Śāligrāma Nighaṇṭu.
11. Patragobhī (Cabbage) : Included in Śāligrāma Nighaṇṭu.
12. Puṣṭagobhī (Cauliflower) : -do-

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सारंश

## अठारहवीं तथा उन्नीसवीं शताब्दियों में आयुर्वेद

—मोमिन अली

अठारहवीं तथा उन्नीसवीं शताब्दियों के काल को आधुनिक काल माना जाता है। इस काल में भारत का मध्ययुग से आधुनिक युग में प्रवेश हुआ तथा इस काल में भारत में महत्वपूर्ण बौद्धिक कार्यकलापों का प्रस्फोटन हुआ। आयुर्वेद के क्षेत्र में अनेक पुस्तकों की रचना हुई, बहुत से वर्तनी अधिकारियों व चिकित्सकों ने भारतीय चिकित्सा पद्धति का अध्ययन किया और अपनी कृतियों को प्रकाशित कराया। आयुर्वेद के इतिहास के रूप में एक नई शाखा का विकास हुआ। आधुनिक चिकित्सा पद्धति की औषध-निर्माण शालाओं के आधार पर आयुर्वेदीय औषधनिर्माण शालाओं की स्थापना हुई। आयुर्वेद के क्षेत्र में हुई इन सभी प्रगतियों का एक संक्षिप्त विवरण इस लेख में प्रस्तुत किया गया है।

