Introduction

All ancient civilizations of the world developed their own medicinal systems, but the ancient Indian system of medicine is considered to be the most methodical and the most holistic system, both in its ideas and its curative measures.¹

Starting from the nineteenth century, Western and Indian historians have done extensive work to carve out the philosophical foundations of Ayurveda and its methods and the dating of Ayurvedic texts. The origin, science, materia medica, evolution, and decline of Ayurveda have been studied in detail. Ayurveda has also been studied in comparison with the ancient Greek system of medicine, and its relationships with ancient Chinese and Tibetan medicine have been explored.²

Clearly missing from the historical analysis of the period is a discussion of the individuals involved in the practice of medicine. In this paper, I try to turn the focus from systemic studies to the study of individuals. Who were the physicians in this period, what kind of training they had, what was their status in the society, and what kind of behavior was expected of them, are some of the questions that I am going to explore in this paper.

I have searched for relevant secondary research on medicine of ancient India through various means, including online search engines, libraries, and personal communication with other experts in the field. During these readings, a few common themes have emerged, which are presented in the following sections.

Vedic Healers

The earliest reliable information about medicine and medical practitioners in India is available beginning from 1500 BCE.¹ ² ³ We get insights into the medicinal practices of the Vedic period (1500-600 BCE) from the four Vedas along with their Brahmanas, Aranyakas, and Upanishads.¹ ² ³

The Vedic people regarded the spirits of all objects in the world as gods. The ailments of the human body were attributed to divine factors, and magico-religious means were utilized in the cure. The role of the priests was to establish contact between
the gods and the humans. They were believed to have the power to summon, pacify, and appease the gods. Priests almost held a magical power over gods through their mantras and used this power for healing purposes as well. The priest, therefore, was also the healer.\(^1\,^2,^3\)

Ṛg Veda mentions Agni or fire as the emissary connecting the gods with the sacrificer. Therefore, the priests of the Agni cult – the Atharvans, the Angiras, and the Bhrugas – were considered proficient in healing through magico-religious rites. They are also considered the authors of the Atharva Veda, which contains details about early understanding of human body, its diseases and their cures.\(^1\,^2\)

The Vedic people also believed that drinking the juice of the soma plant after offering it in fire sacrifice could bestow one with immortality. This veneration of soma paved the way for the recognition of the extraordinary properties of other plants described in the Atharva Veda.\(^1\,^3\)

Plants and their products formed the major portion of the materia medica of the Vedic healers.\(^2\,^3\) The Ṛg Veda says, “for a knowledgeable herb, the herbs rally together akin to an army of kings.” There were individual sages and schools of herbalists who are considered to have identified, described, and propagated the use of particular plants that were often named after the sage. Thus, Kanva was credited with the discovery of the plant apamarga as a medicine, which was then known as Kanva’s plant.\(^1\)

Other materials included cow’s milk and its products, water, and soil from various sources, powdered shells, and rock salt. The Vedic priest would spiritualize the medicine through hymns and sacrifice. Some foods were used as vehicles for certain medicines. In addition to oral medicines, inhalation, fumigation, and topical application of ointments were also done. Certain plants were used as amulets.\(^1\,^2\)

The medicines were administered at specified places and times.\(^3\)

The Vedic priest would attempt to exorcise or propitiate the demonic cause of disease in various ways, some of them quite inventive. The demon could be “trapped” with the means of fire surrounded by a ditch filled with hot water. Fever was “transferred” to a frog tied under the patient’s bed. Magico-religious spells and rituals to cure the various diseases abound in the Atharva Veda.\(^1\,^3\)

While the divine and demonic origins of disease and health were widely recognized, there were some rational ideas also prevalent, which mostly developed during the Later Vedic (1000-600 BCE) period.\(^1\,^3\) The Atharva Veda describes several body parts including bones and internal organs. Certain symptoms such as fever are classified in fair detail, and it is recognized that fever is the “sister” or “cousin” of other diseases.\(^1\) Diseases could also be caused by the derangement of phlegm, wind, or bile, due to seasonal changes, infection with germs or worms, and due to contaminated or unwholesome food. Hereditary diseases were also known.\(^1\,^3\)

### Emergence of Ayurveda

Medical observation and theorization in the Vedic period laid the foundation for a more rational and methodical system of Indian medicine known as Ayurveda (the Science of Life) beginning from 600 BCE.\(^3\) The Ayurvedic practitioner was called vaidya, meaning a person of profound knowledge.\(^6\,^7\)

Evidence for the medicinal ideas and practices of India in the period from 600-200 BCE is derived from accounts of the contemporary Greek visitors to India, Buddhist texts, and Chanakya’s Arthashastra. For Ayurvedic theory, most historians refer to the two Sanskrit medical texts dating from early centuries of Christian era, the Charaka Samhita (Charaka’s collection) and Sushruta Samhita (Sushruta’s collection).\(^1\) Vagbhatta’s Astangahridaya dated seventh century CE is another important text of Ayurveda.\(^1\) References to Ayurveda are also found in epics, Jatakas, travel accounts, and other literature dating to early centuries of Christian era.\(^1\)

The roots of Ayurveda lay in the Atharva Veda in its reliance on medicinal value of plants and other matter. However, Ayurveda emerged as a fully developed rational theory of health and disease, purposefully veering away from magico-religious and empirical thinking. The Charaka Samhita sought to teach the physician the foundational ideas of logic so that diagnosis and treatment could be based on valid observations and reasoning.\(^9\) Ayurveda did retain some of its Atharva Vedic roots in the form of a branch called Bhuṭa vīdya (psychiatry and demonology).\(^1\)

Ayurveda is regarded as an example of intellectual coherence – vaidya applied its tenets consistently to the biological world of humans, animals, and plants. Vaidyas thought of each individual as unique, and paid particular attention to the constitution of the individual.\(^1\) Central to Ayurveda is the tridosa or the three humoral theory of vata, pitta, and kapha, and all physical, physiological processes as well as the pathological causation of disease are explained in terms of the three dosas. Though translated in English as the three humors or as wind, bile, and phlegm, respectively, they had much wider meanings for vaidyas. Equilibrium of the three dosas manifested as health whereas the disequilibrium or disharmony of these three resulted in disease.\(^1,^7,^8\) Each of the seven dhatus or constituents of the body could be affected by this disequilibrium.\(^7,^8\)

Ayurveda grew as a scientific discipline through discourses and discussions among the sages of the time in symposia and conferences.\(^1\) In fact, discussions and exchange of ideas were very much encouraged among the vaidyas, to help standardize the Ayurvedic theory.\(^9\)

### Ayurvedic Methods

The vaidya primarily made use of what is called rational therapy. He examined the individual as a whole and not just his disease.\(^1\) He took careful note of the patient’s innate physiology, mental
state, and other factors such as age, food habits, and season of occurrence of disease.\[^7,8\] Similar to a modern physician, the *vaidya* conducted a thorough examination using both direct perception (*pratyaksa*) and inference (*anumana*). In addition, oral or written testimony of the personal experience of Ayurvedic experts was also accepted as a diagnostic tool (*apṭopadesa*). The *vaidya* was also expected to question the patient in great detail (*prasna*), conduct a thorough physical examination using all his five senses (*pancendriya pariksa*), and confirm or negate his diagnosis through experimentation (*yukti*).\[^1,6,8\] Pulse examination is not mentioned in the classical Ayurvedic texts.\[^1,8\]

Ayurvedic therapies consist of both purificatory and curative methods.\[^1\] Purification, both internal and external, is achieved through a systematic procedure of *panchakarma* (five processes).\[^1,10\] Curative methods involve various means and measures to restore the balance of the vitiated dosas.\[^7\] While the *Charaka Samhita* primarily discourses on therapeutics, various surgical procedures have been described in detail in the *Sushruta Samhita*.\[^3,4\]

Ancient texts place a lot of emphasis on the *vaidya*’s knowledge of drugs. While prescribing a drug, a *vaidya* was supposed to keep in mind both its therapeutic and adverse effects.\[^6,9\] The *vaidya* collected the herbs and other ingredients at auspicious times, spiritualized them with the recitation of *mantras*, and used them to prepare his own drugs.\[^11\]

*vaidyas* laid equal emphasis on the cure of disease as well as prevention and health promotion. They prescribed a daily and seasonal routine as well as attention to nutrition for maintenance of a balanced state of health. They advocated harmony of body and mind, and a harmonious interaction between man and universe for a healthy life.\[^1\]

*vaidyas* resorted to spiritual therapy for diseases whose cause were unknown. These were explained in terms of a patient’s actions in his previous births. The cure involved appeasement of gods through prayers and offerings, recitation of *mantras*, and wearing of amulets and gems.\[^1,6,12\] Similarly, psychic therapy was applied to diseases of the mind. The *vaidya* prescribed various methods at his discretion, to keep the mind away from harmful thoughts.\[^8\]

### The Vaidya as a Professional

Medicine for the *vaidyas* was a full-time profession.\[^11\] There were individual practitioners, *vaidyas* attached to hospitals, and *vaidyas* employed by the state.\[^11,12\] There is also mention of itinerant *vaidyas*, who moved around looking for patients and of *vaidyas* visiting the patient’s house for treatment.\[^1\]

Physicians in state service had to attend to the royal family, courtiers, and palace retinue. The highest position among these state physicians was occupied by the king’s personal *vaidya* known as the *Raja-Vaidya*. A physician used to oversee the food cooked in the royal kitchen to ensure the safety of the royal family. Surgeons and physicians (and toxicologists) were regularly employed in the army both during war and peace.\[^12,13\]

There is mention of eight divisions of Ayurveda in the classical texts, but references to specialist *vaidyas* are rare.\[^7,11,12\] A *vaidya* was expected to be proficient in all fields of medicine including surgery.\[^9\]

There is evidence to show that *vaidyas* were well paid. For example, in the sources physician Jivaka is described as very wealthy. The physicians in state service received lucrative salaries. *vaidyas* were paid in both cash and kind. Nonpayment to a *vaidya* was disapproved, as it was understood that the *vaidya* needed to spend money to collect herbs and other essentials.\[^13\]

The ancient texts prescribe that a *vaidya* should not take fee from the Brahmins and should provide them with medicines. He is advised not to treat criminals, bird-snarers, huntsmen, and the opponents of the rulers.\[^9,11,12\]

There were many checks on the *vaidyas*. License from the state was a prerequisite for taking up medical practice. Fines were imposed for the incorrect treatment of patients. Yet, the *vaidya* had a lot of autonomy as the law codes advise not to argue with physicians.\[^11\]

*Vaidyas* were critical of the quacks.\[^1,6,12\] Efforts were made to check their growth by promoting standardization of Ayurvedic training and practices.\[^11\] Charaka blames laxity on the part of state for the existence of quacks.\[^11,12\] *Sushruta Samhita* prescribes harsh penalties to check these impostors.\[^11\]

Among the renowned physicians of ancient India was a physician named Charaka at the court of Kaniska. It is probable, but not certain, that this physician wrote *Charaka Samhita*.\[^13\] Dridhbala was a Kashmiri scholar-physician, who later revised and reedited the *Charaka Samhita*.\[^1,3,4\] Others include Sushruta, who composed *Sushruta Samhita*, Nagarjuna who revised and enlarged it, and Vagbhata who wrote the *Ashtanga Hridaya*.\[^1,3\] Several Buddhist monks were Ayurvedic pioneers.\[^1\] Perhaps, the most renowned physician of ancient India was Jivaka, to whom numerous stories and legends are attributed. Buddhist references place him in the retinue of Gautama Buddha.\[^9\]

Ayurveda found favor among the commoners as well as the upper classes.\[^8\] *Vaidyas* enjoyed high social status and prestige at par with the upper castes.\[^6,9,11\] However, certain legal texts of the period prohibit the physicians from common dining and bar them from ceremonies. Reasons for this exclusion could have been as varied as dread of communicable diseases, or their coming in touch with blood, which was regarded as impure, or because they came in contact with people of all social backgrounds.\[^11,12\]

Absence of female *vaidyas* is noteworthy. The only mention of a female *vaidya* is that of Rusa whose work on Ayurveda was translated into Arabic on the order of Abassid caliph Harun al
Rashid in the eighth century. As medical education began after the age of maturity, women students could not pursue them since they were married off by this age.¹⁴

**The Ideal Vaidya**

In Ayurveda, a lot of importance was placed on the acquisition of good qualities by a physician.³,⁶,⁸,¹¹ A vaidya was expected to be a well-rounded expert, possessing (i) theoretical knowledge of Ayurveda, (ii) experience, (iii) practical skill, and (iv) cleanliness.¹,¹³ The vaidya was expected to always “try to get more and more knowledge without any prejudice.”¹⁶

A certain kind of behavior, befitting the professional, and setting him apart from the charlatan, came to be expected of the vaidya. According to Sushruta, a vaidya should possess resolve, courage, memory, good speech, and peace, whereas quacks lack these qualities.⁵,¹² Charaka echoes these sentiments and expounds that the vaidya should be healthy, modest, patient, truthful, skillful, and fearless. He should have a steady hand, a disciplined mind, and not be boastful of his knowledge.⁹,¹² Sushruta Samhita prescribes the dress code of white or brownish yellow clothes for the vaidya.⁹,¹³

Ayurvedic preceptors conceived the role of a physician as much more than mere treatment of diseases. He was to help an individual reach the ultimate spiritual goal of self-emancipation, which would not be possible without a healthy mind and body. He was to educate the people about health and disease, and be able to communicate with the lay public and the scholars alike. This required wisdom and skilled communication. Therefore, an adept Ayurvedic physician was supposed to involve himself in an exclusive study of philosophical topics, participate in professional discourse, and become proficient in the art of public speaking.¹⁰

Charaka says this about the goal of the vaidya, “Not for self, not for the fulfillment of any earthly desire or gain, but solely for the good of suffering, should you treat your patients and so excel all. Those who sell the treatment of diseases as merchandise gather dust and neglect gold.”¹⁰

The ancient texts talk in detail about the doctor-patient relationship. A vaidya was expected to be friendly and sympathetic toward his patients so that they do not fear him.¹⁰,¹³ At the same time, he should have a practical approach: Pay attention to the curable and be indifferent to those likely to die.¹,¹³ Charaka recommends that the vaidya keep his conclusions to himself to avoid potential harm.¹³ Ayurvedic texts prohibit physicians from private conversations or indulging in jest with women.¹,¹¹

There are specific instructions regarding the conduct to be followed during a home visit. When a doctor visits the patient in his house, he must be respectful and dress appropriately. He should focus on curing the illness, and refrain from discussing domestic affairs or from announcing the impending death of a patient.⁹

**Medical Education in Ancient India**

Medicine as separate discipline appeared by the second century BCE. Medical education was pursued after finishing the basic education.¹⁴ Medical training was imparted by the teachers in their ashrams. The University of Taxila was well known for the study of medicine in ancient India, students trained here were held in high regard.¹⁴,¹⁵

Ayurvedic pupils belonged to different castes and classes.¹⁹ Charaka says that the purpose of studying medicine varied for different castes. Brahmins studied medicine out of empathy, Kshatriyas wished to keep people safe, whereas Vaishyas did it for monetary gains. Sushruta Samhita says that Sudras could also pursue medicine if they came from a good family.¹⁴

One hardly finds references to families of physicians.¹²,¹⁴ According to Charaka Samhita, students hailing from such families were preferentially admitted. However, at the same time, Charaka asserts that it is training, not birth, that makes a vaidya.¹⁴

Sushruta Samhita describes in detail the internal character and external built of a pupil who is to be admitted as a medical student. This admission process was very stringent. A medical student was expected to be honest, humble, temperate, generous, and hard-working.¹⁹ He was not supposed to be enamored with women or engage in gambling or hunting. His memory and academic performance were also given importance.¹⁴

The medical student was admitted via a proper ceremony.⁶,⁹,¹² He was expected to follow a strict code of conduct and behavior.⁹,¹¹,¹² The legend of Jivaka tells us that medical training was acquired over a lengthy duration of 7 years. Rote learning being an integral part of medical education, students were expected to memorize the classical texts and their commentaries.¹²,¹⁴ They were also encouraged to study popular beliefs, folklore, and Bhuta Vidyā.¹⁴

Practical training was an important part of Ayurvedic studies. Watching their teacher curing the ill, and aiding him in the preparation of drugs resulted in a lot of learning.²⁰ As part of their surgical training, Sushruta advises Ayurvedic students to practice surgical procedures on vegetables, fruits, and body parts of animals. For anatomical knowledge, Sushruta recommended careful observation of a dead body.¹,³,¹²,¹³,¹⁴ Charaka also suggests learning how to identify herbs.¹⁴

After finishing medical education, the pupil was to improve upon his enunciation, conversational skill, and understanding.⁶

**Conclusion**

Medicine in ancient India evolved from the magico-religious Vedic medicine to the highly systematic Ayurvedic therapeutics. The physicians had varied social backgrounds. Highly respected and honored, they were expected to uphold strict moral standards.
Medical education was intensive, and produced physicians who were as skilled in medicine and surgery as in public speaking and communication.

**Financial support and sponsorship**

Nil.

**Conflicts of interest**

There are no conflicts of interest.

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