

# The Circulation of Ayurvedic Knowledge in Arabian Medical Literature - up to 11th Century



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## Abstract

Ayurveda literary meaning "Science of Life" is the oldest Indian indigenous medical system based on fundamental relationship between composition of drugs, man and nature. During the period of Abbasid Caliphate the intellectual exchange of idea between Ayurveda and Islamic medical tradition began with the active support of Bermicide vajirs. They not only invited Hindustani vaidyas to Baghdad but also started translation of Ayurvedic medical literature into Arabic under the aegis of the Bait-ul-Hikmat. These translations highly impressed the Arab scholars. They not only admired and praised Ayurvedic medical literature for its systematic construction but also incorporated it in their writings. Though during the period of Abbasids, Arabian medical writers borrowed extensively from Ayurveda both its pharmacopoeia as well as medical theories but soon after they forgot its debt to India. Many Indian sources remain unacknowledged even in the main bibliographical surveys of later composed Perso-Arabic medical literature. Therefore this article an effort to highlight that Ayurveda has been an inextricable part of Arabian medical rationality. This paper shed light on some of the main features, scholars and texts of Ayurveda which circulated in the Arabian medical literature up to 11<sup>th</sup> century and try to assess their influence on Greco-Arabian medical science

**Keywords:** Ayurveda, Medicine, Text, Knowledge, Circulated, Arabian, Medical, Literature, Up To 11<sup>th</sup> Century

## Introduction

Arabian medical literature has played an important part in the history of healing art. It preserved the medical attainments of the Greeks and the Indians, added to them the results of the medical experiences of various nations like the Egyptians, the Persians and to some extent Chinese. While many of its initial practitioners and transmitters were Jews and Christians, Arabian medical literature were born in the intellectual environment fostered by the Greco-Roman philosophical and medical traditions. But it contains a complete discussion not only of the Greek system of medicine but also of the Indian medicine on the basis of four important Ayurvedic treatise. During the period of Abbasids Arabian medical writers borrowed extensively from Ayurveda both its pharmacopoeia as well as medical theory but soon forgot its debt to India. Many Indian sources remain unacknowledged even in the main bibliographical surveys of later composed Perso-Arabic medical literature.

Therefore, I made an effort to highlight that Ayurveda has been a part of Arabian medical rationality. This paper will focus on some of the main features, scholars and texts of Ayurveda which circulated in the Arabian medical literature and assess their influence on Greco-Arabian medical science.

Ayurveda is the oldest Indian indigenous medical system. It has been derived from the combination of two Sanskrit words 'ayus' means life and 'veda' means knowledge. Thus it is interpreted as science of life and science of longevity.<sup>1</sup> The earliest recorded knowledge about Ayurveda is found in the Rigveda and Atharvaveda. This is believed to have a divine origin, and there are different versions as to how they were divinely revealed to the ancient sages.<sup>2</sup> Leaving aside its legendary origin, the key text of Ayurveda, the Charak Samhita and Sushrut Samhita together with some important treatises like Nidan and Astanghridya contain detailed discussions of the relationship of humans to nature, theories of disease, diagnosis, preparation of drugs, and method of treatment through the deployment of pharmacological and surgical procedure.

The Charak Samhita concerns itself primarily with pharmacology, while the Sushrut Samhita concentrates on elaborate description of surgical procedure. Its text described more than three hundred operations employing 42 different surgical process and 121 different types of instrument.<sup>3</sup>

The philosophy of Ayurveda is based on fundamental relationship between composition of drugs, man and nature. As the universe is composed of five Maha Bhutas (chief element), viz. Akasa or Antariksa (Space), Vayu (air), teja (fire), ap (water) and prithavi (earth), like-wise body is manifestation of these five Mahabhutas. So the drugs are made of these five elements. According to the Ayurveda whatever is found in the Anda (Universe) is also found in the Pinda (Body). So the five elements both universe and the body guides the physician in his choice of the appropriate medicament suited to each other.<sup>4</sup>

The Ayurvedic system of medicine is based on Tridosha Vata (vayu, wind), Capha (mucus) and Pitta (bile), existing in a balanced proportion in health. A disturbance in the balance resulted in disease.<sup>5</sup>

The methodology of treatment in Ayurveda medical science is common with philosophy of natural science. These are (a) direct observation (Pratyaksha) (b) testing of validity of observed facts (anuman) (c) analysis of the test (yukti) and testimony of experts (apatopadesha). In Ayurveda food and drugs are provided according to their cooling or heating effect.

Ayurveda was at its pinnacle during the ascendancy and under the influence of Buddhists. Although in the pre-Vedic and Vedic period the practice of Ayurveda was inextricably intertwined with the culture's religious and magical beliefs but it later evolved into a system based largely on empirical and rational observations.

While the Ayurvedic system of medicine was its zenith in the East, the Greek were busy in advancing medical knowledge in the West. As a result of unremitting diligence and prolonged clinical experience, the Greek had promoted the knowledge of materia medica through successive stages of development. Several useful and tested Ayurvedic drugs were included in their own materia medica. Dioscorides (1st Century A.D.) in his Herbal specifically states that the following plants were brought from India for medical purpose : Cardamom, Nardos, Kostas, Vacha (calamus acorus), Aguru, Gugglu (bdellium). Aloe and Nil (indigo).<sup>6</sup> The Greeks were not content with borrowing known Indian drugs only, but they subjected new ones to therapeutic measures, such as application of leeches and antidote of snake bite, etc. In the book of Celsious, there are excellent accounts of lithotomic and cataract operation, which were developed and practiced by the ancient Hindu medical experts and described in Sushrut Samhita.<sup>7</sup> Hippocrates concept on pneumatic is much the same as we find in the Indian concept of 'Vayu' or 'Prana'. In Platon's Timaios there occurs a theory similar to Tridosha of the Ayurveda. Because in Greece, this theory was an isolated one with no indication of its origin and evolution, many Western

scholars feel the possibility of Indian influence on Greek medical text.<sup>8</sup>

Following the decline of Greco-Roman culture, the light of science was kept burning by the Muslims of Arabia and some extent by Persians. Knowledge of medicine, in particular, was of immense interest to the Muslims of Arabia because the Quran says, "he who restored life to man shall be accounted as if he had restored life to humanity"(V-35). So the art of the healing was taken as an act of pity by the Arabs. During the early contact with the Christian Byzantine empire and the Iranian Sasanian empire Arabians found the medical ideas of Greco-Roman philosophical tradition represented by Hippocrates, Aristotle and Galen flourished in conquer lands. They collected the Greek treasures, appropriated it and made it part of their intellectual legacy.<sup>9</sup> In the famous institution of Jundishapur, The Greeks, Persians, Jews and medical men from India vied with each other in the pursuit of medical knowledge. The Sasanian King, Nausherwan had sent physician Perzoes to India to get Indian medical manuscripts which were later translated into Persian.<sup>10</sup> Thus when Arab reached Jundishapur, they came in contact with Greek theories and also with Indian medical system.<sup>11</sup>

While the Arabs came in contact with Indian medicine in Jundishapur but Indian things were known to Arabs long before the rise of Islam. The name of several Indian products such as Indian sword, Indian spices, sandal and aloes - wood etc. are found in pre-Islamic poems.<sup>12</sup> Several drugs of Indian origin like kafur (kapur, camphor), zanjabil (ginger), tuba (topa) and up (aguru) occurs in the holy Quran and prophet's traditions.<sup>13</sup> Some of the Indian are also said to have been seen in the company of the Prophet and some of them were settled down in Mesopotamia during the early period of Umayyad reign. It is said that Abu said, a companion of the prophet, has related that an Indian Raja has sent an earthen jar containing dried ginger (Zanjabil) to the prophet and he distributed it among all his companions to eat and that he also got a piece.<sup>14</sup> It is also recorded that the first Arab physician and trusted hakim of Prophet, Al-Harith, travelled to India and to Persia, where he studied and taught in famous academy of Jundishapur.<sup>15</sup>

During the period of Umayyads Sindh and some parts of Punjab had come under the Arab political influence and formed the eastern wing of the Arab empire. We have some references about the use of Ayurvedic medicine by Umayyad Caliphs Abu Hashim Khalid bin Yazid and Abdu'l Malik.<sup>16</sup> Though Umyyads took interest in the science of medicine but the development of medical science of Arabs did not assume any organise form before the period of Abbasids. Abbasid period marked a new era in the development of Islamic medical knowledge. They collected the works of the Greeks of the Indians and of other nations on medicine and got them translated into Arabic with the help of master of medical sciences belonging to the different nationalities. During the period of Abbasid Caliphate the intellectual exchange of idea between Ayurveda and Islamic tradition began with the active support of Bermicide vajirs.<sup>17</sup>

During the reign of Harun al Rashid, the Barmakids attained the highest and most influential position in the Abbasid court. They were the descendants of the high priest of the Buddhist temple of Bulkh.<sup>18</sup> They naturally had special interest in Indian sciences and encouraged the translation of Sanskrit medical work into Arabic. They were, however, helped in the attainment of their objective by certain incident in the court.

It has been related for example that when Harun al Rashid suffered from serious disease, the Arab physician of Baghdad who were well versed with Greek medicine were unable to cure him. So, at the suggestion of the courtiers, an Indian physician named Manka (Manikya) was called in by the Caliph. He treated the Caliph and cured him.<sup>19</sup> He was rewarded and later attached to the hospitals of the Barmakids. He translated several Ayurvedic medical books from Sanskrit into Persian and Arabic language which will be mentioned later.

Another important Indian physician who lived at Baghdad simultaneously with Manka was Ibn Dhan, probably the descendent of Dhanapati. He was called to Baghdad by Yahya bin Khlid and was appointed by him as the director of the hospital. Ibn Dhan translated into Arabic, the famous Sanskrit books-Sushrut Samhita on Surgery and Sameeka on the cures for poison.<sup>20</sup> Another physician was Salih, the son or descendent of Bhela (famous physician of India). Salih treated Ibrahim, a cousin of Caliph Harun al Rashid of epilepsy. He was probably a private practitioner of Indian medicine in Baghdad.<sup>21</sup>

The Arab Scholar, knew not only their contemporary Indian physicians, who lived at Baghdad but they also acquired some information about other Indian physician. The following of them have been mentioned by the Arabic writers : Kanka (Kanayana), Sanjhal, Shanaq (Chanaya)<sup>22</sup>, Jaudhar, Bazigar, Qalbarqal, Bahlah, Bakhar, Raha, Jankal, Saka, Dahir, Jabri, Indi, Aikab and Khatif Hindi.<sup>23</sup> Besides famous vaidyas manka, Iban Dhan and Ibn Salih some of the above mentioned physicians were also invited by Yahya bin Khalid during the Harun al Rashid period.

With the help of these scholars large scale translations of Ayurvedic medical literature into Arabic went on under the aegis of the Bayt al Hikmat in Baghdad. Among the Ayurvedic Sanskrit work translated into Arabic were :<sup>24</sup> Charak Samhita, Susrut Samhita, Astanghridya, Nidan, Siddhayoga (Safwatun - Nujh), Sarat (book on poison), Sameeka (on the cures for poison), the book of Mania or Hysteria (Kitabun Fit Tawahhum), The book of Nativities of Alchemy (Kitabu'l Mawalid), the book of the Essence of Reality (Muntahalu'l Jauhar) and a text book of medicine. Besides, several other works on different types of snakes and their poisons, drugs, intoxicants, diseases and medicaments were also rendered into Arabic. Some of these books were firstly translated into Persian (Pahlavi) and later on translated into Arabic.

These translations impressed Arab of scholars of the 9th and 10th centuries. Amar in Bahar al Jahiz (869 A.D.), a scholar of Basara, wrote that

Indian medicine was a highly advanced science. The Indian knew some special secrets and were experts in treating serious illness. They knew the charms by which poisons could be countered and pains cured.<sup>25</sup> Al Yaqubi (900 A.D.), another Arab historian, wrote that the Indian were men of science and thought, who surpassed all other contemporary peoples in every science. In the science of medicine, their ideas were highly advanced. Another great Arabic writer of the 9th century, Abu Maashar al Balkhi, said that the Indians were a most advanced nation. On account of the great distance of India from our country, only a small portion of their science was received by us.<sup>26</sup> There observation of three important authoritative Arabic writers abundantly show the high esteem in which the Arab held the people of India and their medical knowledge.

As a result of the translation of these Ayurvedic works in Arabic, some of the Arab physicians became familiar with the Ayurvedic system of medicine and included discussion of the system in the manuscripts they composed. The first important Arabic medical treatise which elaborately discussed the Ayurvedic system of medicine is Firdaus al Hikmat (Paradise of Wisdom) of Ali Ibn Sahl Rabban al Tabari, (855 A.D.) which he composed for his patron, the Caliph al Mutawakkil.<sup>27</sup> It has 550 pages and is divided into seven parts, 30 discourses and 360 chapters. In the fourth and the last discourse of the seven parts, Al Tabari included a summary of Indian system of medicine on the basis of four important Ayurvedic medical works :<sup>28</sup> The Charak Samhita, Sushrut Samhita, Nidan and the Astanghridya.

Firdaus al Hikmat discusses Indian medicine under 36 chapters.<sup>29</sup> Regarding the beginning of the Ayurveda it records the classical Indian traditions. As regard medical education, it discusses mainly the essential qualities of the medical students. Apart from three humours Tridosha, Firdaus al Hikmat also contains Panchmahabhutas A long chapter is devoted to general principle of health and hygiene with daily routine from early in the morning till at night. In this connection, a short chapter discusses fourteen superfluous matters and natural urges which should not be suppressed and discusses the harm caused by their retention. Six variety of tastes are mentioned. The benefit and harm caused by drinking wine are discussed and moderation is recommended. Under physiology and embryology the origin of man and birth of animal, the embryo and its different parts are discussed. Causes and stages of the disease are discussed in different chapters. Al Tabari states that the condition of a patient can be known by three methods, namely, by examination, by touching the body and by questioning. The last chapter is the longest, devoted entirely to pharmacopeia about the compound medicine and their modes of preparations. Apart from other medicaments of Indian origin it also contains the Hirq-ul-Dhahab (calces/bhasmes of iron, silver and gold) along with mode of preparation.<sup>30</sup>

Al Tabari was the real architect of connecting Ayurveda with Arabian medicine. He states that he considers it desirable to include an account of the Indian system of medicine at the end of the book

because the Indian medical works, theories and medicine are excellent. Al Tabari adds that the Greco-Arab and Indian system of medicine disagree on many points and his intention was to highlight them. Refraining from giving a personal judgment on value, he leaves the choice of preference to his readers who may accept and reject the line of proposed by either of the two systems.<sup>31</sup> In this way he laid the foundation of the comparative study of the different systems of science of medicine. In this respect Firdaus-al-Hikmat is unique in the whole Arabian medical literature.

After Al Tabari, his distinguished and well-reputed pupil, Abu Bakr Muhammad bin Zakaria al-Razi (850-923 A.O), also included Indian Ayurvedic works in many of his medical treatises particularly in his magnum opus, *Al-Hawi*.<sup>32</sup>

Even the great Abu al-Hasan Ibn Sina (Avicenna), the 'Aristotle of Islam', called 'Sheikh-ur-Rais', whose *Qanun* or *Canon* and *Qanun* have been treated as Bibles of the Unani system, while dealing with certain diseases refer to the Ayurvedic system and practice of the Indians.<sup>33</sup> In the closing years of the tenth century, a remarkable work on pharmacology, based on a comprehensive study of Greek, Indian, Arabian, and Persian medicine were produced by a Persian named Abu Mansur Muwaffaq. The 13th century pharmacologist, Ibn-i-Baitar, also shows his indebtedness to Ayurvedic sources.<sup>34</sup>

Influenced by these writers many scholars travelled to India to learn Sanskrit, which they saw the key of Ayurvedic knowledge. We have the examples of Muhammad bin Ismail Tanoji, who lived in Hindustan for years, learned Sanskrit and gathered expertise in psychology (*himyaat*). Some scholars ended up living in India and translating Sanskrit text into Arabic and vice versa.<sup>35</sup> Al-Beruni (973-1051 A.D.) was an important case in point. In his rare treatise on drugs *Kitab-ul-Saidana*, he referred to the skill and wisdom of the Indian physicians and their marvelous cures which they achieved by using aconite to cure hemorrhoids.<sup>36</sup>

The above account of the circulation of Ayurvedic medical knowledge in Arabian medical literature up to 11th centuries shows that by this time the Arabic writers had at their disposal not only most of the Greek medical works but also most of important Ayurvedic medical works. But in the opinion of M.Z. Siddiqi, where as the Arabs were largely influenced by the Greek system, the influence of Ayurvedic system on them was confined to the therapeutic and medicaments only.<sup>37</sup>

In fact Arabian's medical rationality derived both from Greco-Roman philosophical traditions as well as Ayurvedic ideas. This wide route of influences resulted in the development of medical writing style that was encyclopedic and which did not necessarily acknowledge or accurately record its sources. This was particularly true in the borrowing from Ayurveda which was very much part of an Arabian's intellectual legacy and development of Unani system of medicine in Arab but remained unacknowledged.<sup>38</sup> In fact after al-Razi Arab medical writers seldom made any reference to Indian medical works except Charak and Sushrut, to which some of them referred in connection

with drugs and medicaments. For instance Ibn Sina, in his encyclopedic *Qanon*, quotes Indian opinion only on the toxicity of leeches and only mentions the name of Charak in connection with therapeutic. Later legendary Persian medical work *Zakhira-i-Khwarizm Shahi* of al-Jurjani, are equally silent on Ayurvedic influences, except some Indian drugs, even though they are so clearly visible, specially on the section of surgery.

Of course, not acknowledging source can be explained as being part of the medieval Islamic literary style; yet it also had to do with facts that Unani's core, which lay entrenched in pre-Islamic philosophical tradition and had made it evolve as a system of medicine that saw itself separate from any distinct religio-cultural belief systems. In contrast Ayurveda was entrenched in the Hindu idea that saw the physician - the *vaid* - as the incarnation of God. Ayurveda had mixed notion of healing based on magic and superstition with psychosomatic cures of the Greco-Roman type; but it links with Hindu spirituality remained. Unani therefore steered clear of the philosophical and diagnostic theories of Ayurveda. It confined itself to benefiting from Ayurveda's surgical and pharmaceutical resources. Moreover the use of calcined metals and minerals in Unani *tibb* could have had its origin in Ayurvedic practices. The incorporation of India's local and regional *materia medica* within Unani pharmacopeia is another important area of exchange which has drawn attention.

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