

# Sanskrit Sources of Arab-Islamic Medicine

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### I. INTRODUCTION

In the pre-Islamic days medicine among the Arabs was practised on primitive and superstitious lines. Magical charms and talismans also had a role to play alongside dispensation of proper medicines. But when the Prophet Muhammad came, he gave so much importance to the maintenance of health as to give it primacy over religion itself.1 He laid down fundamental principles of preventive medicine for the maintenance and improvement of both physical and psychic hygiene. While appreciating the importance and role of the Islamic care of cleanliness in building a healthy society, George Bernard Shaw has, in his book *The Doctor's Dilemma* held that when Britain conquered the Muslim Sandwich Islands (now the Hawaiian Islands), it compelled the population to renounce Islam and adopt Christianity. And no sooner did it succeed in replacing Islam by Christianity than this led to outbreak of epidemic diseases in the Islands, "because the formulators of the superseded native religion, like Mahomet, had been enlightened enough to introduce as religious duties such sanitary measures as ablution and the most careful and reverent treatment of everything cast off by the human body, even to nail clippings and hairs; and our missionaries thoughtlessly discredited this godly doctrine without supplying its place, which was promptly taken up laziness and neglect".2

Apart from introducing various sanitary measures, the Prophet also exhorted his followers to undertake extensive research in the field of medicine. He himself used a number of Indian drugs and recommended their use to his followers. Among them *Qust Indica* (a kind of Indian incense), *Zanjabil* (ginger)and *Zarirah* (sweet flag) are well-known. He described the medicinal properties of *Qust*, saying: "Treat with this Indian incense, for it has cure for seven diseases. It is to be sniffed by one having throat-trouble, and to be put into one side of the mouth of one suffering from pleurisy (inflammation of the lungs)".3

#### I. INDIAN PHYSICIANS IN BAGHDAD

After the expansion of Islam, especially in the Abbasid period (750-1258 CE), the Arabs paid serious attention to the holistic medical system of India known as *Ayurveda* (The Science of Life Or Longevity). The term *ayurveda* comes from two Sanskrit words, *ayu* (life) and *veda* (science). Based on the principles of natural law, this system uses herbal remedies and lifestyle modification to restore and improve health. India had a developed system of medical treatment. Along with human health, animal healthcare was also given top priority in ancient India. The rich medical literature of Ayurveda contained in the Sanskrit language, the golden period of which, extending from 800 BCE to about 1000 CE, was marked by the production of two important medical treatises known as the *Sushruta-Samhita* and the *Charaka-Samhita*, written respectively by Acharya Sushruta, a surgeon, and Acharya Charaka, a physician.4 It is interesting to note that even plastic surgery existed in India as early as 8 BCE when some ancient Indian physicians utilised skin grafts for reconstructive works. For example, Sushruta-Samhita the knowledge and procedure of plastic surgery in the form of rhinoplasty and otoplasty.5 It gives an elaborate description of surgical procedure. It has described more than 300 operations, in which 42 different surgical procedures and 121 surgical instruments have been used. 6

It could have been possible only on the basis of sophisticated surgical instruments manufactured in this country. It is a well-known fact of history that India had developed the technology of tempering steel in very ancient periods of time, thousands of years ago before the common era by developing knowledge of chemical reactions of different elements. That also facilitated the development of surgery in ancient India. And *Sushruta Samhita* is a living testimony to this fact.It was of particular interest to the Arabs that the Indian physicians practising Ayurveda laid emphasis on dietetic treatment in preference to medical treatment. The Arab physicians also became further enlightened on the ethical, moral and spiritual dimensions of health as incorporated by the Indian system of medicine. Some Indian medical men were experts in veterinary medicine also, and knew how to treat the diseases of different animals including horses and elephants.6 It is said that an Indian work on veterinary science was also translated into Arabic under the title *Kitab al-Baytarah*.7 It is noteworthy that knowledge about the Indian system of medicine had already percolated to far-off areas in

West Asia even in pre-Islamic times under the Sassanids through the famous Persian Academy of Jundishapur where Indian physicians met their foreign counterparts and imparted instruction in their own system of medicine.8 The Arab physician al-Harith ibn Kaldah whom the Prophet Muhammad used to consult was a product of the same institution. His son Nasr ibn al-Harith also practised medicine and became more popular than his father. It was mainly because of these physicians that medicine could develop among the Arabs in the early Islamic period. An idea of this development may be had from the fact that the contingent of army sent by Caliph Umar ibn al-Khattab (CE 634-44) for the conquest of Iran was equipped with a good number of physicians and surgeons.9

The golden period of the diffusion of knowledge of *Ayurveda* among the Arabs took place in the Abbasid period when several eminent Indian physicians were invited to Baghdad, the capital of the Abbasid Empire, and employed in state hospitals or in translation works. Some among these were Manaka (Manikya), Ibn Dahan (Dhanpati), Salih ibn Bahlah, Kanaka, Sanjhal, etc., whose names have been frequently mentioned by Arab historians of science and civilization.Manaka, well-versed in medical and other sciences of India, a successful practitioner of the healing art as well as a philosopher of saintly character, had a profound knowledge of Sanskrit and Pahlavi languages.10 He is mentioned as a distinguished Indian physician by Ibn Abi Usaybi'ah in his famous book '*Uyun al-Anba fi Tabaqat al-Atibba* (Fountains of Information on the Classes of Physicians). It is related that once when Caliph Harun al-Rashid (CE 786-809) fell seriously ill and his court physicians failed to cure him, Manaka was invited from India to treat him on the initiative of a certain Abu 'Amr 'Ajami.11 When he cured the Caliph, he was given a high rank and position. He also translated a number of Sanskrit medical books into Persian which were later rendered into Arabic.12

While moving about in a market in Baghdad accompanied by his interpreter, Manaka is said to have come across a juggler who was displaying his drugs and medicaments and explaining their medicinal properties. He described a certain medicine prepared by him as a panacea for all the diseases of man. Hearing this, the critical Manaka smiled and said if that was the case why the Caliph took the trouble of inviting him from India. He further said that if the juggler was an imposter, the Caliph should kill him as the law permits the massacre of such persons. For if he was not killed, he would kill several persons daily. This shows how bold, confident and conscientious he was as a physician.13 Ibn Dahan (Dhanpati) was also invited from India for the treatment of the same Caliph at the suggestion of his vizier Yahya al-Barmaki. He was appointed as chief medical officer at the prestigious Barmakid Hospital in Baghdad in recognition of his merit. He also assisted in the translation of several Sanskrit works into Arabic.14

Salih, son or descendant of the famous Indian physician Bahlah was another eminent Ayurvedic physician who visited Baghdad. His name Salih shows that he had converted to Islam. It is also said that the Indian name of this physician was Sali which the Arab writers Arabicized as Salih.15 Ibn Abi Usaybi'ah has related an interesting incident about this physician which shows how perfect he was in diagnosis and treatment. On a certain day Ibrahim, cousin of Caliph Harun al-Rashid, fell unconscious and remained in a state of coma for a long time. He was examined and treated by no less a physician than Bakhtishu, the Caliph's personal physician, who was wellgrounded in the Greek system of medicine. But he lost all hope of Ibrahim's recovery and declared that the patient could not be saved. Then it was suggested to the Caliph that Salih bin Bahlah, an expert in Indian medicine, should be consulted to save Ibrahim's life. Salih examined Ibrahim, felt his pulse and reported to the Caliph that there was no cause for him to worry, and that his cousin would be saved. In the meantime news reached the Caliph that Ibrahim had expired. The Caliph became very angry and started cursing Salih and the Indian system of medicine. And as preparations for the last funeral rites were in progress, Salih appeared on the scene and sought the Caliph's permission to examine Ibrahim once more. No sooner did the physician cast a look at the patient than he requested the Caliph not to bury his cousin alive. He took a needle and pierced it into the thumb of the patient's left hand between the nail and the flesh, whereupon the latter withdrew his hand (feeling the pain). This established that Ibrahim was still alive. Then Salih called for frankincense and bellows from the store, and blew the smoke of the incense into Ibrahim's nose. And within ten minutes the body of Ibrahim started agitating, following which he sneezed and awoke to the surprise of all, with cries of Allahu Akbar (Allah is the Greatest) echoing all around to the credit of this physician. On being resuscitated from apparent death, Ibrahim lived for a long period of time after that incident and enjoyed a good career.16 This case clearly proves that the ancient Indian physicians could distinguish between external death and real death, and that they applied artificial breathing to treat some fatal cases, whereas Greek physicians were not aware of this technique.17

### II. TRANSLATION OF SANSKRIT BOOKS ON MEDICINE INTO ARABIC

Translations of several major and minor Sanskrit works on different branches of medicine were sponsored by the Abbasid Caliphate in Baghdad. They were translated into Arabic with the assistance of Indian physicians and scholars. The Sushruta-Samhita and the Charaka-Samhita were two such major Sanskrit books. As mentioned by Ibn al-Nadim18 in his Al-Fihrist (The Bibliographic Compendium), the Sushruta-Samhita (Ar. Susrud) written in the form of a surgical compendium was translated by Manaka at the instance of the abovementioned Yahya Bin Khalid al-Barmaki. This book was composed by the celebrated physician-surgeon Sushruta around 900 BCE, who was considered one of the masters and notables of Indian medicine in his time. It is believed to have been the first Indian book on medicine which was translated into Arabic. The book is divided into eight sections and one hundred fifty chapters, in which about 341 herbs used in medicine have been described in detail.19 He has also mentioned in it symptoms of different diseases and their treatment with details of medications, due to which it had become like a popular notebook on medical treatment at that time. The second important book that was translated into Arabic was the Charaka Samhita (Ar. Sirak) composed by Acharya Charaka. His life and times are not known with certainty. He is believed to have lived during the 4th century BCE. He made significant contributions to the Indian system of medicine known as Ayurveda. His book is a comprehensive treatise on various aspects of medicine including aetiology, diagnosis, treatment and ethical considerations. His diagnostic methods included examination of the pulse, urine and other bodily fluids.

The third most important and comprehensive Sanskrit text that was translated into Arabic was *Ashtanga Hriday* (Ar. Ashtankar). It was composed by Vaghbhat, an Ayurvedic physician from Kashmir. *Ashtanga Hriday* in Sanskrit means 'heart or essence of eight components' and it refers to all the eight sections of Ayurveda - general medicine, paediatrics, psychiatry, ENT, surgery, toxicology, geriatrics and aphrodisiac therapy. It was translated during the caliphate of Harun Al-Rashid by Ibn Dahan, the Superintendent of the Baghdad Hospital. Another important Sanskrit work that was translated into Arabic was the *Nidana* (Diagnosis) of Madhavakar, who was a 7th-century CE Indian Ayurveda practitioner. Divided into 69 chapters containing 1552 *shlokas* (verses)20, this book on pathology deals in detail with the diagnosis of diseases along with their causes, symptoms and complications. It was considered a very authoritative book on the subject. It was translated into Arabic by an unidentified scholar, because it is not yet certain as to when and by whom *Nidana* was translated into Arabic.21

Other important Sanskrit books on medicine translated into Arabic were: *Kitab Sundastaq* ( The Book of Success) which was translated into Arabic by Ibn Dahan, who was appointed as a superintendent of the Barmakid Hospital in Baghdad; a short treatise on drugs derived from Indian medicinal herbs by an unidentified author; *Kitab Ilajat al-Hubala* (Book on the Treatment of Pregnant Women); *Kitab Tuqashtal* (a treatise on a hundred diseases and their treatment); *Kiab Rusa* by an Indian lady physician on female diseases; *Kitab Asma 'Aqaqir al-Hind* (Book on Indian Drugs) which was translated by Manaka for Ishaq Bin Sulayman; *Kitab Ra'y al-Hind fi Ajnas al-Hayyat wa Sumumiha* (Book on the Knowledge of India about Different Categories of Snakes and their Poisons; a book by Shanaq (Chanakya *c*. 350-283 BCE) under the title *Kitab al-Sumum wa al-Tiryaq* (Book on Poisons and their Antidotes), which was first translated into Persian by Abu Hatim Balkhi with the assistance of Manaka and then it was rendered into Arabic by Abdullah Bin Sa'id at the behest of Caliph al-Mamun;22 *Kitab al-Tawahhum fi al-Amrad* (Book on the Suspicion of Diseases and its Impact on Health) by Yuqastak; *Kitab al-Baytarah* (Book on Veterinary Science) ; Sage Shalihotra's (1500 BCE) book *Asvasastra* (Science of Horses) ; and *Siddha Yoga*, etc. 23

### III. ARAB AUTHORS ON INDIAN MEDICINE

In addition to the translation works, there flourished among the Arabs a number of physician authors who wrote books on medicine including the Ayurveda such as Ali Ibn Sahl Rabban al-Tabari (c. 838-c. 870 CE), author of the first medical encyclopaedia *Firdaws al-Hikmah* (The Paradise of Wisdom); Muhammad Bin Zakariya al-Razi(d. 930 CE), author of *al-Hawi*; Ibn Sina (980-1037 CE), author of *al-Qanun fi al-Tibb*; Abu Mansur Muwaffaq, who wrote on pharmacology by making a comprehensive study of Greek, Indian and Iranian medicine, *etc.* In addition to the above, Abu Rayhan al-Biruni (973-1050 CE), renowned as the Ptolemy of his age, was also full of appreciation for the medical wisdom of ancient India. He derived his knowledge about the Indian medical system by studying the above-mentioned *Charaka-Samhita.* In his rare book on drugs titled *Kitab al-Saydanah fi al-Tibb* (Book of Pharmacy in Medicine), he referred to the skill and wisdom of Indian physicians and their cures by using aconite in case of haemorrhoids.24 All these authors included chapters on the Ayurvedic system of medicine in their respective books and quoted major Ayurvedic works as authorities on different subjects of medicine. Many Vaids (Ayurvedic physicians) were invited to Baghdad, and the Abbasid capital had become a hub of Ayurvedic medicine and practitioners. As a result, the Arab physicians became

acquainted with the Indian knowledge of anatomy, physiology, embryology and therapeutics. Of these authors al-Tabari was the first Arab physician who gave a comprehensive and documented account of the Indian system of medicine. His *Firdaws al-Hikmah* which he composed for his patron Caliph Mutawakkil (R. 847-861) is briefly introduced below. It is needless to mention that the Arab-Islamic medicine transmitted to the West contained major ingredients of Indian medical legacy.

#### IV. FIRDAWS AL-HIKMAH

This book is chiefly based on Indian and Greek sources. It comprises thirty seven chapters that are subdivided into different subchapters. It's critical edition was published by M. Z. Siddiqi at the Sonne Press of Berlin in 1928. The discourse on Ayurveda (Science of Life or Longevity) in this edition covers pp. 557-624. As stated by the editor, this was based on five manuscripts - one each from Berlin, London, Gotha and two from India. Of the Indian manuscripts one is preserved in the Raza Library, Rampur (U.P.), while the other belonged to Hakim Khwaja Kamaluddin of Lucknow. 25 In his quotations and discussions of Indian medicine, he drew extensively from the distinguished four Indian physicians - Sushruta, Charaka, Madhawkar and Vagbhata The main Greek physicians quoted by al-Tabari in this book included Galen, Hippocrates, Diascorides, Rufus of Ephesus, Democritus, Paul of Aegina and Magnus of Emessa. As regards the Indian sources, most of the Sanskrit books translated into Arabic seem to have been consulted by him. On his own admission, the moral principles discussed by him in his book were mainly based on the Indian books. He was also greatly impressed by the theory and practice of the Indian medical system. He has also discussed the basic principles of the Ayurveda.26 Among different matters discussed in this book, "it is advised that the treatment of a patient should not be started in haste. One should not undertake the treatment unless he is well-experienced (in medical science) and possesses full knowledge of the medicaments, because medicine in the hands of an ignorant person is like a deadly poison. If he gives it more than the required dose or does not use it at the right time, it will act as a killer. On the other hand, even poison becomes the life-saver (elixir of life) in the hands of an experienced physician".27 The last chapter of the book is the longest one which is devoted entirely to pharmacopoeia. The names of many compound Indian medicines along with methods of their preparations are mentioned in it in detail. Of the advantages of the medicine Brahmi Rasayan discussed by him, it is held that it has the potential to make an old man young. It also includes a discussion on Salajeet and its medicinal benefits. In addition, the methods of converting steel, gold and silver into burnt ashes (bhashma) are also explained in it.28

### V. LINGUISTIC EVIDENCE

The Arabic language also bears witness to the fact that the Arabs drew large benefits from the rich Indian medical literature. A number of Sanskrit words relating to Indian medicinal and aromatic herbs have found their place in the Arabic language. Some Arabic words of Indian origin along with their Sanskrit equivalents are listed below in support of this point:

Sandal (chandan) Nilufar (piluphal) Qaranfal (kanakphal) Philphil (pipli pipla) Jaiphal (jaiphal) Itriphal (triphal) Shakhirah (shakhar) Balilaj (bahera) Halilaj (harh) Al-Baladur (bhalatakah) Musk (moshka) Kafur (karpur) Zanjabil (zunjabera

Besides, as described by Sayyid Sulaiman Nadwi, a distinguished Indian Arabic scholar, there are at least three words of Indian origin which have the honour of being used in the Holy Quran. They are used in the description of Paradise in the following verses:

- 1. Lo! The righteous shall drink of a cup whereof the mixture is of water of Kafur (karpur).29
- 2. They are watered there with a cup whereof the mixture is of Zanjabil (zunjabera).30
- 3. They are given a drink of a pure wine, sealed, whose seal is Musk (moshka).31

### VI. CONCLUSION

From the foregoing it is evident that the Arabs drew large benefits from the rich Indian legacy in medicine and allied branches of knowledge and learning. In the course of time several concepts of the Indian medical system including its ethical and psychotherapeutic aspects were permanently absorbed into the corpus of the Arab-Islamic scientific heritage. As such the term used for the Arabian system of medicine as the Unani (Greek) medicine is not at all illustrative of the historical fact. It, therefore, should better be known as Indo-Arab or Greco-Indo-Arab medicine. Thus India has left its indelible mark on the medical heritage of the Arabs and through them on the development of modern medicine in the West. Because, after having completed the process of translation and assimilation, they carried on and patronised medical studies and research with great zeal on a wide scale. As a result, a good number of medical scientists flourished among them, who became the harbingers of modern medicine in almost all its branches including clinical treatment, psychotherapy, pharmacy, anatomy, surgery, etc.

As regards the original Arab-Muslim writers on medicine, Ibn Zakariya al-Razi, author of *al-Hawi fi al-Tibb* (The Comprehensive Book on Medicine) in five volumes; Ibn Sina, author of *al-Qanun fi al-Tibb* (The Canon of Medicine) ; Abul Qasim al-Zahrawi, author of *al-Tasrif* (The Guide); Ibn Zuhr, author of *al-Taysir fi al-Mudawat wa al-Tadbir* (Facilitation of Therapeutics and Diet); Ibn al-Nafis, discoverer of blood circulation in the human body and author of the book *Sharh Tashrih al-Qanun* (Commentary on the Anatomical Portion of Ibn Sina's Canon of Medicine); Ibn al-Baytar, author of *Mufradat* (Simplicia) in four volumes, to mention only a few, are very famous, whose works are counted among the classics on Islamic medicine. An idea of the influence exerted by them on the development of medicine in the West may be judged from the fact that their books were enthusiastically translated into Latin and other European languages as well as studied as textbooks in European universities for several centuries. All that could be possible only because of the cross-cultural exchange of knowledge between the East and the West, in which Muslim scientists played an important role and served as the main connecting link between the ancient and the modern civilization.

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