

## MEDICAL TRENDS IN KASHMIR DURING ZAIN-UL-ABIDIN'S REIGN\*

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Zain-ul-'Abidin's interest in art and literature is well-known in Kashmir. During his reign (1420-70 A.D.), apart from a number of Muslim scholars, many non-muslim savants (Kashmiri Pandits) adorned his court and held high ranks without any caste or creed distinction. His aptitude for literature can be judged from the establishment of a Translation Bureau for rendering Sanskrit works into Persian and vice-versa, since he himself had been an ardent scholar.

He did not neglect social welfare and health needs of his subjects despite his preoccupations with multifarious administrative jobs. Many renowned *hakims* and  *vaidyas* flourished under his royal patronage and new dispensaries were started in the kingdom. He brought some able *hakims* and trained midwives from Samarkand (in Uzbek S.S.R.) with a view to provide medical facilities to his subjects, especially the female patients. Among the Indian *vaidyas*, Shri Bhat was an accomplished Indian doctor, well versed in every branch of medical science and he yielded great personal influence in the politics of his time. Similarly, Karpura Bhat received royal patronage for raising the standard of Ayurvedic medicine.

Among the muslim (Unani) physicians, Mansur bin Muḥd came from Persia to serve at his court. He wrote *Kifaḳa-e-Mansari* and dedicated same to the sultan. This deals with the general principles of medicine, drugs and methods of treatment. He also compiled *Tashriḳ-e-Mansuri*, a collection of anatomical knowledge of Unani physicians. According to some historians, the fame of Mansur, in the west, rests upon his book on anatomy. In Persia, however, he is also known as the author of another medical work, *Ghiyathia*.

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of arts and sciences but was surrounded by scholars and learned men with whom he held discussions on various subjects. He bestowed upon them land grants and made arrangements for their residence at Naushahr, so that their constant company may be available to him. He knew Sanskrit, Persian and Tibetan languages besides Kashmiri, which was his mother tongue.

His aptitude for literature can be judged from the establishment of a Translation Bureau which was responsible for rendering Sanskrit works into Persian and vice versa. In this way, knowledge was made accessible to those who knew either of these languages. Among some pandits, who held a good position in the Translation Bureau, Bodhi Bhatt, an eminent scholar, translated several Sanskrit works into Persian; Srivara, another renowned historian and scholar of Persian and Sanskrit, translated Jami's *Yusuf-o-Zulekha* into Sanskrit during his reign and completed it in 1505 A.D. Two other Brahmanas, Simha and Rūpya Bhaṭṭa, were the court astrologers. Among the Persian and Arabic scholars, the names of Maulānā Kabīr, Mullāh Hāfiz Baghdādī, Mullāh Jamāl-ul-Dīn and Qāzī Mir Alī deserve special mention. Mullāh Ahmad was a scholar in both Persian and Sanskrit and rendered the *Mahābhārata* and Kalhana's *Rājatarānginī* into Persian at the behest of the Sultan<sup>1</sup>.

The Sultan did not neglect social welfare and health needs of his subjects despite his preoccupations with multifarious administrative jobs. Many renowned *hakims* and *vaidyas* who looked after the health of the common people flourished under him. The general health of the women was also well looked after. According to Abul Fazl<sup>2</sup>, Sulṭān Zain-ul-Ābidīn had such a proficiency in medical art that he often personally prescribed and administered medicines to the patients. Among the Indian *vaidyas*, Shri Bhatta was an accomplished Indian physician and well-versed in every branch of medical science. He wielded great personal influence in the court of Zain-ul-Ābidīn. It is on record that once the Sultan was suffering from a malignant boil which baffled all Muslim *hakims* and Hindu *vaidyas*, but, fortunately, was cured by the application of some ointment prescribed by Shri Bhaṭṭa. Out of gratitude and regards, the king ordered the *vaidya* to ask for any royal favour. But the great Pandit instead of asking anything for himself, requested the Sultan to bestow all possible help for the uplift of the neglected and persecuted Brahman community of his kingdom, so as to enable them to live peacefully and honourably. The Sultan highly appreciated this spirit of sacrifice of the great Brahman physician and was pleased not only to accede to his request but he also appointed him as officer-in-charge (*Afsar-ul Atibbā'*) for the study and promotion of medical science in his kingdom. It is interesting to point out that the locality where Shri Bhaṭṭa used to practise is still known as 'Shri Bhattan Wan' at Mohalla Haval, Sangin Darwāza in Srinagar. Another *vaidya* who deserved to be called, 'Master of Vaidyas' was Karpura Bhaṭṭa who was unrivalled through the length and breadth of Kashmir. His proficiency was such that he could diagnose the patient at the first sight and treat him success-

fully. Similarly, Śiva Bhaṭṭa and Rāmānand, the chemist, received the royal patronage for raising the standard of Āyurvedic medicine in his kingdom. Unfortunately, the details of their lives and works are shrouded in mystery.

The Sultan also opened several primary and high schools (*pathśālās* and *vidyā-layas*) exclusively for the Hindu students for study of theology and other basic subjects to acquire medical learning. The king also extended the facilities of scholarships to poor Hindu students so as to enable them to go to Banaras and other centres of learning in Deccan for prosecuting higher studies in various subjects including medicine. The Sultan also founded various schools and institutions for elementary and higher studies (*makātib* and *madāris*) in Islamic sciences including medicine (*tibb*) for the Muslim students only. A school was established near his palace at Naushahr, and Mullāh Kabīr was recruited as its in-charge. The king himself was so much influenced by the deep knowledge and acumen of Mullāh Kabīr, that he was pleased to attend his learned lectures sometimes. It is significant to mention that inspite of ravages of time, this school survived till as late as seventeenth century. Another centre of Islamic studies was the hospice (*khānqāh*) of Bābā Ismā'il Kubravī, who later in the reign of Sultan Hasan Shāh (1472-1484 A.D.) became Sheikh of Islam (*Sheikh-ul-Islām*). It is also mentioned that he was also deputed as chief of the medical school (*Madrasa-e-Dāru'lshifā*) at *Pakhrībal* near Dal lake which was founded by Hasan Shāh. The fame of his learning and sagacity was so wide-spread that students used to come from Herat and other far-flung parts of Islamic world to learn Islamic sciences at his feet. A large *madrasa* was also erected at Sir near Islamabad and Mullāh Ghāzi, Khān was posted as its principal. There was also another school (*Madrasat-ul-'Ulūm*) at Siakot for imparting education in various sciences for which the Sultan bestowed six lakhs of rupees, while his queen, Tāj Khātūn donated her precious necklace for meeting the expenditure of the school. It is worth mentioning here that the Sultan made arrangements for erecting a number of hostels where free boarding and lodging were provided particularly for the poor and meritorious deserving students.

A similar philanthropic spirit and unflagging zeal and enthusiasm for patronizing the various educational centres is not only noticed in Sultan and his successors but also among the women of royal families and nobles and other dignatories. For example, Lachhma Khātūn, wife of a minister of the Sultan, Gul Khātūn, the mother of Sūltān Hasan Shāh, Hayat Khātūn, his queen and Shāh Begum, the wife of his prime minister Malik Ahmad and nobles such as Nauroz and Tāzi Bat took great interest in imparting education and in the establishment of several medical schools at their expense.

As a result of the patronage of the Sultan, the education in various arts and sciences (including healing art) was made available to every class or community, high or low, as is evident from Srivara's statement: "Even women, cooks and porters were poets; and the books composed by them exist to this day in every

house. If the king be a sea of learning and partial to merit, the people too become so. The meritorious king Zain-ul-Ābidīn for the purpose of earning merit built extensive lodging houses and the voices of students studying logic and grammar arose from these houses. The king helped the students by providing teachers, books, house, food and money and he extended the limits of learning in all branches. Even the families which never dreamt to learning produced men who through the favour of the king, became known for their erudition..... There was not a branch of learning of art and literature or fine arts which were not studied”<sup>3</sup>.

Many famous hakims from central Asia and India came to his court in order to add to their professional knowledge by serving his subjects. The Sultan opened a number of hospitals and dispensaries in various parts of his kingdom where free medicines were supplied to the patients without caste or creed distinction. When Zain-ul-Ābidīn returned to Kashmir from Samarqand (in Uzbek S.S.R.), he brought with him many artisans and persons skilled in various arts and sciences with a view to introduce new industries and to provide more medical facilities to the people of his kingdom. The author of *Tārīkh-i-Kashmīr* states : “During his stay at Samarqand he acquired varied knowledge. When he returned to Kashmir he brought with him a number of artisans skilled in different trades (arts and crafts), such as paper-makers, carpet-makers, harness-makers and well trained midwives”<sup>4</sup>.

Sultān Abū Saīd of Khurasān (in NE Iran) sent some presents to Sultān Zain-ul-Ābidīn and he also reciprocated this by sending the products of Kashmir. The most prominent presents being the drugs, specially aromatic simple ones, which formed the main constituents of compound medicaments such as heart and brain tonics. Firishta comments as follows :

“Sultān Abū Saīd sent five Arab horses and sturdy camels of good breed as presents to Sultan Zain-ul-Ābidīn. Pleased with this acts of courtesy, Sultan Zain-ul-Ābidīn, in return, sent saffron, musk, rose water, vinegar, perfumes, paper, elegant shawls, glass bowl and other fine products of Kashmir industry”<sup>5</sup>.

A great achievement was made by Mansūr bin Muḥammad bin Ahmad bin Yūsuf bin Faqīh Ilyās who composed a Persian monograph on anatomy in 1396. He dedicated this monograph to Amirzādah Pir Muḥammad Bahādur Khān, the grandson of Timur-e-Lung. This work, in original, was unnamed. Subsequent generations named it ‘*Tashrīh bi al-Taswīr*’ (The illustrated anatomy) or *Tashrīh-e-Mansūr* (Anatomy of Mansur) since it dealt with human anatomical illustrations although reproducing human figure is prohibited in Islam. It is rather difficult to term it as the first illustrated work in Persian. Another Persian work on the subject known as ‘*Mukhtasar dar ‘Ilm-i-Tashrīh*’ (A Brief Manual of Anatomy) was compiled by ‘Abd-ul-Majid al-Bayazawī in the year 1228 A.D. It was also illustrated with rather crude, coloured drawings.

Mansur's monograph on anatomy is divided into four parts: Dedication, Introduction, Five Chapters and a Conclusion. The first chapter deals with bones. The second chapter discusses the nervous system. In the third chapter, he deals with muscles. The fourth chapter explains Mansur's view on veins. The fifth chapter describes the arteries and their tributaries. The concluding chapter is devoted to the compound organs as termed by Mansur. This is followed by a terminal chapter upon pregnancy and embryology.

In the first chapter, Mansur described about the bones at considerable length. The first great problem which the Unani physicians set upon themselves was to decide the number of bones in the human skeleton. It is not easy to answer this question, for the number of bones vary with age. For example, at birth the patella, the bone of the knee-joint, is not present. Later during the life times bones, originally separate, tend to fuse into one and accessory bones, known as sesamoid bones, tend to appear. The correct traditional answer, according to Mansur, to this problem is two hundred and forty-eight bones (excluding hyoid, sesamoid bones and auditory ossicles).

Throughout the classical period, two hundred and forty-eight (248) bones have generally been accepted. Ibn Jamī' (1138-93 A.D.) confirmed it. Ghiyās-ul-Dīn Iṣfahānī (fifteenth century) pointed out in the anatomical section of his book, '*Mīrrat-ul-Siḥḥat*' (the mirror of health) that the above-quoted number of bones was traditional and is not scientifically accurate. Most of the medical historians held that Tawaddud, the talented slave girl of the '*Arabian Nights*', too, agreed with this number. On carefully going through the concerned Nights of the book, I found that Tawaddud also was confused in her reply. On the 449th Night, she held that there were two hundred and forty-nine (249) bones in all in the body but on 450th Night, she described that human skeleton is composed of two hundred and forty (240) bones, showing a marked difference of nine bones in her reply. Some of the physicians also held that the body consisted of 247 and 256 bones.

In those days (ninth century A.D.) every educated person, whether man or woman, took some interest in medical science, particularly in anatomy, because the subject, apart from medicine, was considered a branch of theology. Reference in this connection is found in al-Ghazzālī's *Alchemy of Happiness* (Wisdom of the East Edition). He comments: "Man has been truly termed a 'microcosm' or little world in himself, and the structure of his body should be studied not only by those who wish to become doctors, but by those who wish to attain to a more intimate knowledge of God, just as close study of the niceties and shades of language in a great poem reveals to us more and more of the genius of its author". However, in spite of great controversy on the subject, the most popular and accepted number was 248 bones. In this connection, Maṣūf quotes a Persian poem (*Naẓm*) stating that if you desire to know the exact number of bones in human body, you refer to the Arabic word '*Haram*' (Harem) which

gives the exact knowledge of human skeleton. Some of the authors used another Arabic word '*Rahim*' (carrying the meaning of mother's womb) instead of *Haram* to arrive at the bone number. But, as far as, our Arabic knowledge goes, the use of '*Rahim*' is more correct here in every respect. Because, '*Rahim*' is used here in dual sense, (a) the place for fertilization and development of the embryo, and (b) the source (*maddah*) of the number (248) which is composed of three letters

and contains  $\left( \frac{R}{200} (\text{ر}) + \frac{H}{8} (\text{ح}) + \frac{M}{40} (\text{م}) \right)$  thus, the total number comes

to two hundred and forty-eight. Both these words (*Haram* and *Rahim*) are being mostly used in Urdu, Persian and Arabic literature. This is the number (248) given by the *Mishnah* (c. 200 A.D.) and all Arab writers. Al-Rāzī says it is arrived at by counting after the manner of Galen. The latter only states (*De foet. form VI: kuhn iv, 694*) that there are more than two hundred (200 bones. The number (248) is, however, given in the pseudo-Galenic *Abridgement (Jawāmi)*. Modern texts of anatomy count 206 bones in all (excluding sesamoid bones). The difference is mainly due to our counting only 22 bones in the skull and 52 in the trunk.

Manṣūr followed Ibn Jamī 'in his incorrect theory that the apex of the heart was strengthened by a special bone or there is a bone found in the heart. It is typical of the purely literary character of Manṣūr's anatomy that he omits to mention the fact, expressly stated by Galen (*De anat. admin. vii Kuhn ii, 619*) and Ibn Sinā, that this cartilaginous bone is not found in man. But, according to Ellenberger and Baum, "the horse, pig and dog have 'heart-cartilage' and the beef two 'heart-bones'. In old horses and pigs the cartilage has frequently ossified, in the dog it is very small or wanting altogether".

This book being in Persian script and fully illustrated, carries little value to the students of Unani medicine compared to what has already been written long before by Avicenna, Rhazes and 'Āli bin Ābbās Majūsī. It also appears from Mansur's explanations that he solely relied upon theology and tried to solve many medical problems through *ḥadīth* or the traditions of his predecessors on the subject rather than explaining medical theories or personal observations as already stated by Avicenna in his Canon of Medicine. For example, Mansur quotes the words of the Prophet, who once replied to an inquirer that the semen of man is white and "the semen of women is yellow. These join together. When the semen of the male is predominant over the semen of the female, a boy is procreated; and vice versa".

It is noteworthy that Manṣūr also compiled another medical treatise in Persian entitled '*Kifāya-e-Manṣūri*' (sufficiency of Mansur), also known as '*Kifāya-e-Mujāhidyya*' (sufficiency of Mujahid) in 1423 A.D. The author dedicated this work to Sultan Zain-ul-Ābidīn to whose court he was attracted due to the wide-spread justice, scholarship and generosity of the king. It was lithographed in Lucknow

in 1823 A.D. and is, therefore, easily available. The book is composed by the author generally on the lines and style of Avicenna's Canon. In its first part, it deals with the general principles of medicine, fevers, surgical ailments and other diseases from head to foot containing their treatment. While, in the second part, it deals with fundamental principles of simple drugs and compound medicaments along with their formulae, composition and their uses in different ailments. No doubt, the book is the basis of the principles and practice of Unani practitioners in India for a long time and formed an important part of the tibbi curriculum. It is of great interest to note that the author, in the chapter on organs (*Ā'ḍā'*) discussed a good deal of anatomy of simple and compound organs as well. This shows his keen interest about the innermost details of this subject. In the same chapter, the author throws ample light on embryology and, in this connection, he described the different stages of the development of embryo<sup>9</sup>. It cannot be said whether the author has copied directly from '*Tibb-ul-Nabbi*' or from other authors who have quoted from *ḥadīth* or '*Tibb-ul-Nabbi*'. It is further interesting to point out that in the Holy Quran and *Ḥadīth* (i.e. *Tibb-ul-Nabbi*), apart from developmental stages of foetus, three membranes or coverings of the foetus have also been described. Dr. Wahid-ul-Zamān Rana, in his leading article, 'When does life start' has tried to prove that a close study of different verses of the Koran shows that the signs of life start as soon as the fertilization takes place. In other words, the initiation of life occurs at that moment when the fusion of two sets of chromosomes is completed.

In fact, this book is more comprehensive, useful and interesting than the earlier monograph on anatomy (i.e. *Tashrīḥ bi al-Taṣwīr* or *Tashrīḥ-e-Manṣūrī*). According to some historians, the fame of Manṣūr, in the West, rests upon his anatomical work, it may be claimed without any hesitation that he achieved a remarkable name in medical history of medieval India, due to his later work (i.e. *Kifāya-e-Manṣūrī*). In Persia, however, he is also known as the author of another medical work, '*Ghiyā-thiā*' (the aid). It is learnt that there is a solitary manuscript of this work in Calcutta and, unfortunately, this has not been seen by me.

To sum up, all the medical works of Zain-ul-Ābidīn highlighted the Unani system of medicine in and outside Indian subcontinent. These earned him high reputation in the medical history of the Kashmir.

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