# **History of Medicine**

# The Bukhtīshū' Family: A Dynasty of Physicians in the Early History of Islamic Medicine

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#### **Abstract**

The Bukhtīshū` family produced a generation of physicians of devout Christian faith and Nestorian descent. Because of their high level of education and special knowledge of medicine they enjoyed a special status under the patronage of the Abbasid caliphs, who appointed many of them as court physicians. From the 2nd century AH (8th century CE) to the 5th century AH (11th century CE), they contributed greatly to the practice of medicine by generously supporting the collection and translation of medical texts and by heading newly formed hospitals and dispensaries. They also disseminated the science by writing and teaching the art to many eager students. Last but not least, they themselves practiced medicine with a high ethical standard.

They, therefore, can be considered true pioneers of Islamic medicine. In this article we will examine their family tree, their genealogy, and their contributions to the practice and teaching of medicine during this early period of Islamic civilization. We will also endeavor to examine their origins and close association with the medical school and hospital in the ancient city of Jundishapur, an institution that was held in high esteem during the early conquests of Islam. Later, at the invitation of the caliph, they were to transfer their practices to the newly founded capital of the Abbasid Empire, the city of Baghdad. There, they established medical schools and hospitals modeled after the prototype of Jundishapur. These institutions in their turn came to exceed the standards of the school and hospital in Jundishapur. We will also examine their contributions to the practice of medicine during this historical period.

Key words: Bukhtīshūʻ, Nestorian physicians, Islamic medicine, history of medicine.

#### Introduction

he Bukhtīshū` family members (Figure 1) were Nestorian Christians of Persian extraction. They were closely related initially to the med-

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ical school and hospital in Jundishapur (also referred to as Gondeshapur) established by Sassanid Emperor Anushirwan (531 to 579 AD).

### The Medical School and Hospital in Jundishapur

Greek influence was already dominant in Jundishapur when Byzantine Emperor Justinian closed the Athenian school in 529 CE. This drove

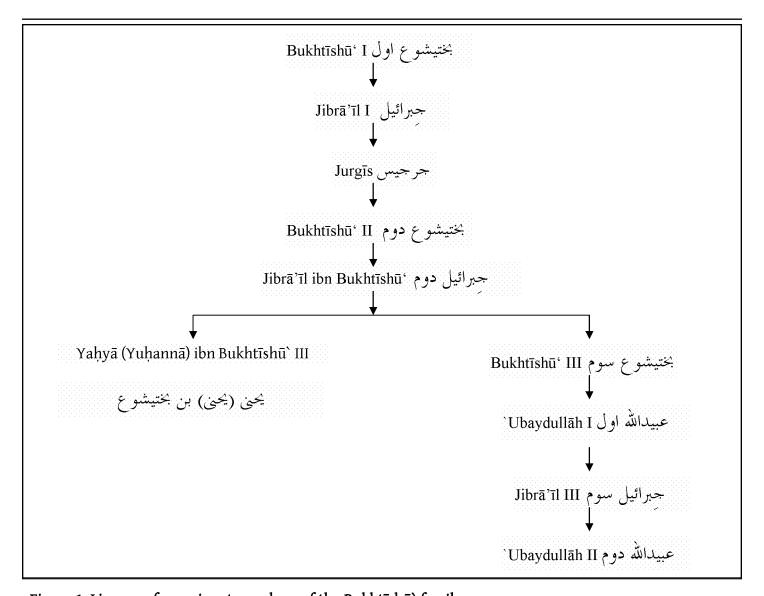


Figure 1. Lineage of prominent members of the Bukhtīshū` family.

many learned Greek physicians east towards the protection of the Sassanid king, Khusraw Anushirwan the Wise. A university with a medical school and a hospital were established under his patronage, and Greco-Syriac medicine blossomed. To this was added medical knowledge from India, brought by his physician minister or vizier, Burzuyah. Anushirwan had sent Burzuyah to India to learn and bring back the secrets of Indian medicine. On his return the latter brought back from India the famous "Fables of Bidpai," several Indian physicians, details of Indian medical texts, and a Pahlavi (early Persian) translation of "Kalila wa Dimma." Khusraw's search for knowledge included acquisition of a translation of Aristotelian logic and philosophy. Thus, at the time of the Muslims' invasion and capture of the city, the medical school of Jundishapur was already well established and had become a renowned medical center of Greek, Syriac, and Indian learning. This knowledge had intermingled in this crucible to create a highly acclaimed and state-of-the-art medical school and hospital. After the advent of Muslim rule, this medical school and hospital continued to thrive under the leadership of the first recorded Bukhtīshū family member, nicknamed Bukhtīshū` the Elder or Bukhtīshū` Senior,¹ who became the chief physician.

Unfortunately, not much is known about him except that he must have lived before the time of the second Abbasid caliph, al-Manṣūr (ruled 754–775 CE).

We will now proceed to describe each of these distinguished physicians of this family and their contributions to the development of medicine in the early Islamic period.

#### Etymology

According to ibn Abī Uṣaybi`a's Uyūn al-anbā',² the

name "Bukhtīshū'" means "servant of Jesus." However, more modern scholars consider the root of the word to be derived from pre-Islamic Pahlavi (early Persian) language. "Bukhtag" means "the one who is freed or delivered" and "Yishū'" means "Jesus Christ." Thus, Bukhtīshū' means one who is freed or delivered by Christ.

# Bukhtīshū` I (Bukhtīshūʻ the Elder) and Jibrā'īl I ibn Bukhtīshū` I

Both Bukhtīshū' I and Jibrā'īl I ibn Bukhtīshū' I were the original members of the Bukhtīshū' family and practiced in Jundishapur. Not much is known about them other than being cited in the descriptions of their sons and grandsons who became more famous by their association with the Abbasid caliphs of Baghdad and about whom more information is available.

#### Jurjis I (Jorjis, Georges) ibn Jibrā'īl I ibn Bukhtīshū' I

Jurjis I (Jorjis, Georges) ibn Jibrā'īl I ibn Bukhtīshū' I was the grandfather of Jibrā'īl II ibn Bukhtīshū` II. He was head of the medical school at Jundishapur. He was the grandson of Bukhtīshū' I (senior). He had earned himself a name as a physician of repute and authored several medical books. When Caliph al-Mansūr (ruled 136-158 AH) became sick with a stomach ailment in 148 AH/768 CE, he summoned his court physicians. His own physicians could not cure his ailment. At this time Juris was heading the medical school and hospital in Jundishapur as their chief physician. Caliph al-Mansūr was advised by his physicians to send for Jurgīs from Jundishapur. An envoy was sent forthwith to fetch Juris (148 AH/765 CE). Initially he refused, but he was threatened with death if he did not comply. He then consented to come to Baghdad and placed his son Bukhtīshū` II in charge of the hospital in his absence. He was accompanied to Baghdad by two of his assistants, Ibrāhīm and `Īsa ibn Shahla. He was brought in the presence of the caliph who asked him several questions to ascertain his credentials. Juris had an impressive personality and was talented in speech. He satisfied the caliph with his answers. The caliph then described his symptoms to Jurjis, who listened to him carefully and stated that he would be able to treat the ailment. The caliph was requested to submit a urine sample. After examining the caliph's sample, Juris prescribed him the medications that cured him.

The caliph was very impressed and honored him

with gifts and titles. He also gave him a reward of 10,000 dinars. Because Jurjis's wife had not accompanied him, the caliph sent him three Byzantine slave girls. Juriis accepted the money but returned the slave girls, citing that his religion forbade him from marrying other women when his wife was still alive. This impressed the caliph even more, and he entrusted him with the treatment of his entire clan. He fell ill in 152 AH/769 CE. Before allowing him to return to Jundishapur, the caliph invited him to convert to Islam but he declined, saying that he wanted to return to the land of his forefathers to die. Amused by his obstinacy, the caliph sent an attendant with Jurjis to ensure that he reached his destination safely. In return, Jurjis sent him 'Isa ibn Sahl to attend to his medical needs as his son Bukhtīshū' II could not be spared from the Jundishapur hospital. The date of Jurjis's death is unknown.

#### Bukhtīshū' II

During the reign of Caliph al-Mahdī, his son al-Hādī fell ill. The younger Bukhtīshū` II was summoned to Baghdad in 171 AH/787 CE and cured the crown prince. Al-Hādī's mother, Khayzuran, preferred her own physician, Abū Koraish. For this reason, Caliph al-Mahdī allowed Bukhtīshū` II to return to Jundishapur.

Later the same year, Caliph Hārūn al-Rashīd suffered from severe headaches and summoned Bukhtīshū` II again to Baghdad. After he cured him, he appointed him chief physician in his court and head of a hospital he founded in Baghdad. As a court physician, he also attended the viziers in the service of the caliphs, especially those of the Barmakī family. When he attended Ja`far ibn Yaḥyā al-Barmakī in 175 AH/791 CE, he recommended his son Jibrā'īl to be the medical attendant. Bukhtīshū` II died in 185 AH/801 CE.

# Jibrā'īl ibn Bukhtīshū' II (Jibrā'īl II)

Jibrā'īl II was the son of Bukhtīshū` II and the grandson of Jurjis ibn Bukhtīshū`. He was an astute physician and earned a great reputation in the practice of medicine. He achieved great fame as a Bukhtīshū`. He was associated with several of the caliphs, but, like most of the court physicians of his time, suffered from the vicissitudes of his masters. His father introduced him to the Barmakī family, and he became the personal physician of Ja'far the Barmakid in 175 AH/791 CE.

When he successfully cured one of Caliph Hārūn al-Rashīd's favorite slaves of a hysterical paralysis, he won the confidence of the caliph and was appointed his private physician in 190 AH/805 CE. However, during the last illness of Hārūn at Tus in Persia, he was too candid in the exercise of his duty, thus totally displeasing his master and as a result fell into disgrace.

A bishop whom the caliph had consulted in his place incited Hārūn still further against Jibrā'īl, and he was condemned to death. Vizier al-Faḍl ibn al-Rabī` managed to prevent his execution and rescinded the decree. Hārūn's son al-Amīn again appointed him court physician. When the latter was overthrown by his brother al-Ma'mūn, Jibrā'īl was again imprisoned and did not receive his freedom until 202 AH/817 CE, when the vizier al-Ḥasan ibn Sahl required his services. Three years later, he again fell into disgrace and was superseded by his son-in-law Mīkhā'īl. In 212AH/827 CE, al-Ma'mūn was forced again to send for him as Mīkhā'īl was unable to give advice regarding an illness of the caliph.

Al-Ma'mūn, in gratitude of his rapid recovery, reappointed him to his office and returned to him the property that had been confiscated. But Jibrā'īl II did not live long to enjoy his master's favor. He died the following year in 213 AH/828 CE. He was buried at the monastery of St. Sergius at al-Madā'in (Ctesiphon).

He wrote various medical works and exerted much influence upon the progress of science in Baghdad. He was the most prominent member of the famous Bukhtīshū` family. He took pains to obtain Greek medical manuscripts and patronized the translators. He recognized the talent of Ḥunayn ibn Isḥāq, whom he commissioned to translate many original Greek medical works.<sup>3</sup>

#### Mīkhā'īl

Mīkhā'īl, the son-in-law of Jibrā'īl II, was a competent physician in the service of Caliph al-Wāthiq. He replaced Bukhtīshū` III when al-Wāthiq banished the latter to Jundisahpur.

#### Yaḥyā (Yūḥannā) ibn Bukhtīshūʻ

Yaḥyā (Yuḥannā) ibn Bukhtīshū` was the illegitimate son of Jibrā'īl ibn Bukhtīshū`. Yuḥannā worked in Baghdad for al-Movaffaq Bellah about 279 AH/892 CE. He translated books from Greek to Syriac. He wrote Mā yaḥtāj ilayhi al-ṭabīb (What the Physician

Needs). He is also known to have written a now-lost treatise on astrological knowledge necessary for a physician. The book *Taqwīm al-adwiya fī-mā ishtahara min al-a'shāb wa-al-'aqāqīr wa-al-aghdhiya* (the organization of drugs concerned with the well-known plants, medicaments, and foodstuffs) is attributed to him in some extant copies, although no author is identified in the manuscript at the United States National Library of Medicine, which states that the "treatise has not been published and merits further study and comparison with other preserved copies." 4 Yuḥannā became bishop of Mosul in 280 AH/893 CE.

#### Bukhtīshū' III

Bukhtīshū` III, son of Jibrā'īl II, succeeded his father in 213 AH/828 CE. He accompanied al-Ma'mūn on his campaigns in Asia Minor. During al-Wāthiq's reign, the second successor of al-Mamūn, his rivals had him banished to Jundishapur. He was summoned back to Baghdad during the last illness of al-Wāthiq, but he arrived after his death. Al-Wāthiq's successor al-Mutawakkil appointed him court physician, and his practice earned him great esteem. He lived in pomp and style comparable to al-Mutwakkil, but he was later banished to Bahrain, where he died in exile in 256 AH/870 CE.

#### `Ubaydullah I ibn Bukhtīshū' III

A nonphysician in a family of physicians, al-Muqtadir appointed `Ubaydullah finance officer. On his death, al-Muqtadir confiscated his property. His widow married a physician and informed her son Jibrā'īl III about his forefathers and induced him into practicing medicine.

# Jibrā'īl III

Jibrā'īl III was the son of Ubaydullah I ibn Bukhtīshū` III. After his father's death, his mother married a physician. After the death of his mother, his stepfather disinherited him and he became penniless. Jibrā'īl III moved to Baghdad and began studying medicine exclusively in Baghdad and working at the famous `Aḍuḍī Hospital. After treating successfully an envoy from Kirman, he was called to Shiraz by the Buwayhid 'Aḍuḍ al-dawla, but soon thereafter he returned to Baghdad. He only left Baghdad for short consultations, even declining an offer from the Fatimid al-`Azīz who wished to establish him in Cairo. He instead chose to go to Mayyafaraqin at the invita-

tion of the Marwanid Mumahhid al-Dawla Abū Manṣūr, who did not allow him to return to Baghadad. He died in Mayafarikin in 396 AH (1005 CE).

## `Ubaidullah II ibn Jibrā'īl III ibn Bukhtīshū' III

`Ubaidullah II ibn Jibrā'īl III ibn Bukhtīshū` III was one of the last notables of the Bukhtīshū` family. His full name is recorded as Abū Sa`īd `Ubaidullah ibn Jibrā'īl ibn `Ubaidullah ibn Bukhtīshū` ibn Jibrā'īl ibn Bukhtīshū` ibn Jurjis ibn Jibrā'īl. He was a friend of ibn Buṭlān, a prominent Christian physician of Baghdad and the author of a treatise on hygiene and dietetics, which was later influential in Europe through its Latin translation.

`Ubaidullah II's work al-Rawḍa al-ṭibbiyya (The Medical Garden) is an abridged version of Tadhkira al-hādir wa zād al-musāfir (Reminder for the Resident and Provision for the Traveler). Tadhkira contained 50 chapters on philosophical and medical subjects. According to Meyeroff, al-Rawḍa exists in several manuscripts found at Escorial, Gotha, the British Museum, and the National Library of Paris.<sup>5</sup> It was prepared and edited by Father Paul Sbath from manuscripts in his possession.<sup>6</sup>

His life has been recorded by Leclerc<sup>7</sup> and Sourdel.<sup>8</sup> But the indepth record can be found in the descriptions of ibn Abī Uṣaybi`a. He lived in Mayyafaraqin, a town in upper Mesopotamia near Amida or Diyar Bakr. He was a friend of ibn Buṭlān. He died in 450 AH/1058 CE.<sup>2</sup>

While the works of `Ubaidullah II's ancestors are lost, his following works are extant:

- 1. Al-Rawḍa al-ṭibbiyya
- 2. The Merits of Physicians.
- 3. A Treatise on Different Kinds of Milk
- 4. On the Right Way to Preserve Descent
- 5. The Necessity of Respiratory Motion
- 6. Curiosity of Extemporaneous Questions out of Scientific Principles of Medicine
- 7. Tadhkira al-hāḍir wa zād al-musāfir
- 8. Special Book on the Science of Properties
- 9. On the Nature, Properties and Utility of the Organs of Animals<sup>9-10</sup>
- 10. Kitāb al-`ishq maraḍan (On love as a disease)8
- 11. A missive on the historical work of a monk Hārūn ibn Azzun

We shall now analyze some of the chapters written in the *Tadhkira* that, no doubt, can be considered his major contribution. It comprises 50 chapters on

diverse subjects as kinds, species quantity and quality, nature, substance, body, spirit and the soul, elements and humors, organs, activity and function, reason, appetite and lust, love sensation, imagination, thought and memory, space and time, anger and wrath, motion, knowledge, conjecture, argument, syllogism, crises, voice, vision, sight, pulse, health and disease, cause, symptoms, nutriments, and remedy.

It would be impossible to cover the contents of each of these chapters in depth. In this work he quotes extensively from Greek authors, relying on the translations of Ḥunayn ibn Isḥāq. He does not rely on Arabic authors who preceded him, such as the famous al-Kindī and al-Fārābī. It seems that he was unaware of the philosophical works of his contemporaries, including those of ibn Sīnā, al-Bīrūnī, and ibn Haytham.

The inspiration of the chapter "On the Soul" is no doubt from the works of Plutarch, Aristotle, and Pythogaras and the schools of Thales, Dichearchus, Anaxagorus, Heraclitus, and Galen.

In the chapter "On Love", he quotes from various authors, including the Greek author Themistius, the Indian Masaqsar, the love theories of Aristotle, and his forefather Jibrā'īl.

The chapter "On Sight" reflects the thoughts and beliefs of the Greeks, who had promulgated the concept that sight resulted from a ray projecting from the eye and landing on an object causing it to be perceived. His contemporary ibn al-Haytham had proposed the first truly scientific explanation of sight as the result of a ray entering the eye from an object and being perceived by the retina.<sup>11-3</sup>

It can thus be concluded that, even up to the time of Ubaidullah (the 11th century CE), Greek philosophical thought and tradition had deeply influenced the Islamic scientific tradition and conduct and was taught and learned by all scholars of the time. Towards the end of the 12th century CE, religious dogmatism was gaining ground and prevented innovative research and advancement in the Islamic philosophical and scientific traditions.

#### Bukhtīshū` IV

Bukhtīshū` IV was physician to Caliph al-Muqtadir and his son al-Rādī.

#### Conclusion

The Bukhtīshū` family contributed much to the art, science, and practice of medicine for several cen-

turies beginning with the earliest identifiable member, Bukhtīshū` the Senior, in the early part of the 2nd century of Hijra/8th century CE and ending with the last prominent descendant, Bukhtīshū` IV, who worked for Caliph al-Muqtadir and his son al-Rāḍī in the middle of the 11th century CE.

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