



# BIOGRAPHY

## Hubaysh-i Tiflisi: Physician and Astronomer of the Twelfth Century C.E.

### Introduction

Regarding the formation of the Anatolian Seljuk Sultanate, it could be stated that the Seljuk Turkomans, who had migrated from Turkestan to Iran, set the scene for the establishment of a new dynasty after the defeat of Mas'ud I of Ghazni in 1040 C.E. by Tughril (Cahen, 1968, p. 22). This dynasty ruled most parts of Iran and founded a powerful state by 1058 C.E. (Figure 1)

Following the formation of this government, Turkoman tribes started their migration to Iran. Since the beginning of the governance of Tughril, the Seljuk statesmen realized that this wave of migration would have adverse effects on their government. Hence, they directed the new tribes to Anatolia (Asia Minor). This trend continued during the reign of Alp Arslan and his son Malik-Shah, culminating on August 26, 1071, with the Battle of Manzikert, which resulted in the defeat of the Byzantine army by the Seljuk army in Anato-

Seyyed Alireza Golshani (Ph.D.)<sup>1</sup>   
Jamshid Roosta (Ph.D.)<sup>2</sup>   
Babak Daneshfard (M.D., Ph.D.)<sup>3,4</sup>

1- History of Iran after Islam, Medical Philosophy and History Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

2- Associate Professor, Department of History, Faculty of Literature and Social Sciences, Shahid Bahonar University of Kerman, Kerman, Iran

3- Chronic Respiratory Diseases Research Center, National Research Institute of Tuberculosis and Lung Diseases (NRITLD), Shahid Beheshti University of Medical Sciences, Tehran, Iran

4- Persian Medicine Network (PMN), Universal Scientific Education and Research Network (USERN), Tehran, Iran

### Correspondence:

Jamshid Roosta  
Associate Professor, Department of History, Faculty of Literature and Social Sciences, Shahid Bahonar University of Kerman, Kerman, Iran

e-mail: jamshidroosta@uk.ac.ir

Received: 10 May 2024; Accepted: 19 Oct 2024; Online published: 1 Aug 2025  
*Research on History of Medicine*/ 2025 Aug; 14(3): 253-262.

Copyright: © Journal of Research on History of Medicine. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 Unported License, (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited non-commercially.

### Citation:

Golshani, S.A., Roosta, J., Daneshfard, B., 2025. Hubaysh-i Tiflisi: Physician and Astronomer of the Twelfth Century C.E. *Res Hist Med*, 14(3), pp. 253-262. doi: 10.30476/rhm.2024.102607.1218.



lia. This battle can be considered one of the most influential battles throughout history because it led to the entrance of the Seljuk Turks into Asia Minor (Anatolia), conquering most areas of the region. The outcome of this battle was the establishment of a new government known as the Anatolian Seljuk Sultanate (Peacock, and Nur Yildiz, 2013, p. 2), the government that ruled Asia Minor (Anatolia) from 1081 C.E to the fourteenth century C.E (Uzuncarsili, 2001. pp. 1-2; Shokr, 2006. pp. 18, 73) (Figure 2).

Although the Anatolian Seljuk Sultanate was established in the eleventh century, it gained considerable power one century later during the reign of Kilic Arslan II, the fifth Anatolian Seljuk ruler (Cahen, and Holt, 2000, pp. 10-11).



Figure 1. The Seljuk Empire at the end of the eleventh century (Cahen, 1968, p. 18)

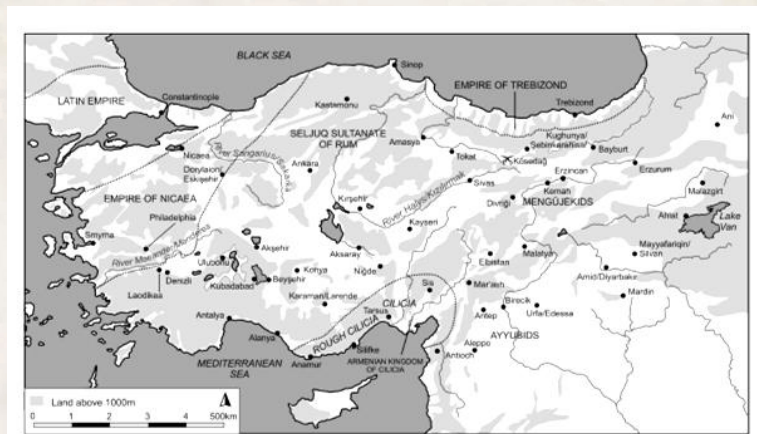


Figure 2. Anatolia in the Seljuk of Rum period (Peacock, and Nur Yildiz, 2013, p. 5)



He was interested in science, culture, and literature. His court was the house of scholars, physicians, poets, and literary figures. He distributed the important cities of his territory among his children to enable them to operate independently in their cities. His children also considerably valued physicians, poets, scientists, and secretaries. During the reign of Kilic Arslan II, scholars, poets, and other great scientific and literary figures gradually set foot in the Anatolian Seljuk courts due to the political stability of that time. With the attempts made by these thinkers, the light of knowledge was shed on Anatolia and soon on other parts of this land. One of these thinkers and scholars was Hubaysh Ibn Ibrahim (Turan, 1995: 109-111). (Figure 3).

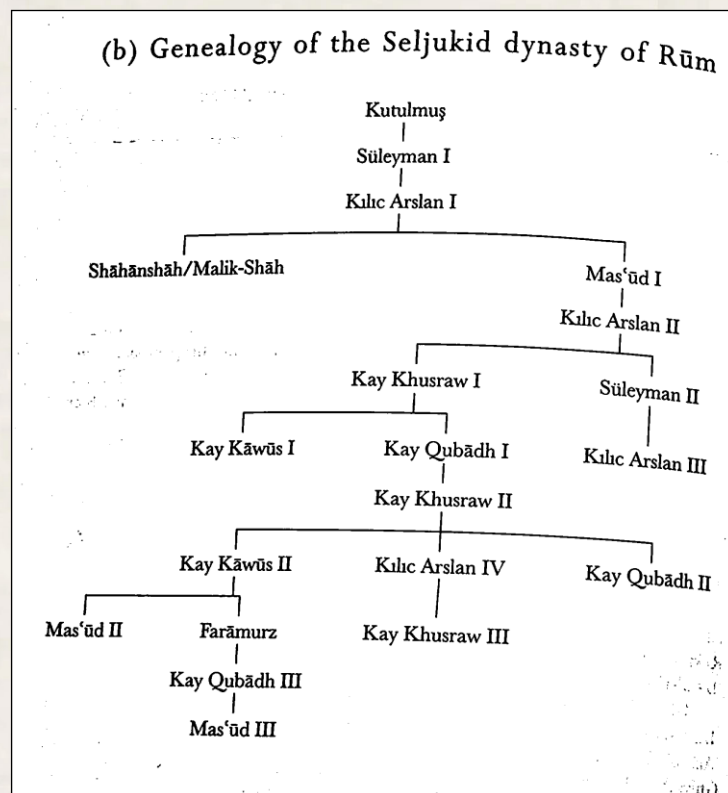


Figure 3. Genealogy of the Seljukid Dynasty of Rum (Cahen, and Holt, 2000, p. 278)

### Hubaysh Ibn Ibrahim Al-Tiflisi

Sharaf al-Din Abulfadl Hubaysh (or Hussein) Ibn Ibrahim Ibn Mohammad Al-Tiflisi was the first physician and literary figure of the court of Kilic Arslan II. The information on the life of this great Persian scholar is scarce, but his multitude of works on medicine, astronomy, and literature made him a significant figure (Riahi, 1981, p. 620; Nazari, 2000, p. 30). Hubaysh Ibn Ibrahim Al-Tiflisi was born in the far west of the cultural territory of Iran, i.e., the city of Tbilisi. Although his exact birthdate is unknown, it is assumed that he was born in the twelfth century C.E. based on the dates he mentioned in his books. As regards his birth date, it could be stated that since he penned *Qanun Al-Adab* in 1150 C.E., *Kefayat al-Teb* in 1155 C.E., and *Dimensions of Quran* in 1162 C.E., he was probably born 30 years before 1150 C.E., which is around 1121 C.E. Haji Khalifa and Baghdadi believed he passed away in 1231. However, it is unlikely that he lived for more than 110



years. Brockelmann and Kahala believe he died in about 1203 C.E. based on the years of compilation of his books (Haji Khalifa, 1967, p. 1379; Kahhalah, 1957, p. 189).

Hubaysh became familiar with Persian, Arabic, Syriac, Romani, and Greek languages in Tbilisi and studied sciences such as medicine, astronomy, and linguistics with great effort and perseverance. However, the civil unrest in Tbilisi forced him to leave his hometown. To illustrate, it is important to note that Tbilisi was conquered by Muslim forces early in the spread of Islam. Over time, Islamic and Iranian cultures gradually took root in the region, as some Georgians converted to Islam and Muslim conquerors settled in the city. In the early twelfth century, however, the Georgians regained power and launched an uprising against the occupiers. Around 1120 C.E., with the support of David II, the Cuman tribe, and other non-Muslim groups, they revolted (Riahi, 1981, p. 620). Although Muslim rulers and sultans made several attempts to reconquer Tbilisi, their efforts only escalated the conflict and plunged the city into further chaos. Notably, Mahmoud ibn Mohammad Seljukid (an Iraqi Seljuk), Ilqari Artaqi, Debis ibn Sadaqeh, and Tughril ibn Mohammad (Saheb Aran) advanced on Tbilisi with an army of thirty thousand troops.

They were defeated by the Georgians, with many either killed or captured. The Georgians then laid siege to Tbilisi, a conflict that persisted until 1121 C.E., when they finally seized the city. Upon its capture, they set Tbilisi ablaze, leaving it in ruins. This marked the end of the prolonged rule of Muslim leaders in the city (Riahi, 1981, p. 620).

Due to the chaos in Tbilisi, many Muslim fugitives and homeless residents fled the city, seeking refuge in other Islamic regions, including Baghdad. It appears that Hubaysh ibn Ibrahim left Tbilisi for Baghdad around the same time or possibly a year earlier. In Baghdad, he gained the respect of *Naqib al-Noqaba* Sharaf al-Din Ali ibn Torad ibn Mohammad Zeynabi, a minister under Caliph al-Mustarshid, who became his patron. Taking advantage of Baghdad's stability and intellectual environment, Hubaysh al-Tiflisi composed *Taqvim al-Adwiya*, a medical encyclopedia detailing various drugs and their properties in Persian, Arabic, Syriac, Romanic, and Greek. In recognition of Sharaf al-Din's unwavering support, he dedicated the work to him (Riahi, 1981, p. 620).

Before departing for Anatolia, he traveled to Khorasan, where in 1155 he dedicated his medical work *Kefayat al-Teb* to Sultan Sanjar (Ahmad Sanjar) (Parsapoor, and Isfahani, 2009, p. 2). This dedication likely stemmed from the intense events unfolding in Khorasan at the time. Just two years earlier, in 1153, Sultan Sanjar had suffered a crushing defeat at the hands of the Oghuz Turks, who took him and his wife, Terken Khatun, captive. During their imprisonment, Terken Khatun fell gravely ill, and *Kefayat al-Teb* may have been composed in part to aid in her treatment. Tragically, despite these efforts, she succumbed to her illness in 1156 (Husseini, 1984, p. 123).

The precise length of Hubaysh ibn Ibrahim's stay in Baghdad remains unclear, but his writings indicate that after spending several years there, he eventually departed for Rome, where he would live the rest of his life. During this period, Rome was under the rule of Kilij Arslan II, a sultan celebrated across the Islamic world for his patronage of culture and learning. Given the sultan's well-documented support for scholars and intellectuals, it is highly probable that Hubaysh deliberately chose to settle within his domain. Some researchers also argue that, "In his search for the market of Persian knowledge, Al-Tiflisi eventually travels to Rome" (Riahi, 1981, pp. 621-622).

Hubaysh Ibn Ibrahim entered the territory of the Anatolian Seljuk Sultanate and its



capital, Konya, under these circumstances. Konya proved to be a suitable place for Hubaysh-i Tiflisi to spend the final years of his life. During this period, he compiled several important works, including *Kamel al-Tabir*, *Kefayat al-Teb*, *Seheh Al-Abadan*, and *Javameh al-Bayan*—a translation of the Noble Quran. Notably, *Kamel al-Tabir* is the oldest Persian book written in Anatolia. This work is a dream interpretation guide arranged in alphabetical order. Hubaysh Ibn Ibrahim wrote it for Kilic Arslan, the father of Rukn al-Din Suleiman Shah (Nazari, 2000, p. 30).

Among Hubaysh ibn Ibrahim's Persian works is *Kefāyat al-Ṭibb* (also cited in some sources as *Bayān al-Ṭibb*). Dedicated to Qutb al-Dīn Malikshāh—son of Kilij Arslan II and ruler of Sivas and Aqsara (Riahi, 1981, p. 623)—this medical compendium is structured in two parts: the first covers general medicine, health preservation, and disease treatment, while the second examines food, compound drugs, and the properties of medicinal substances (Felfalduleh, 2004, p. 282). Hubaysh's corpus extends beyond this work, encompassing both Persian and Arabic texts. His Persian writings include: 1) *Qanun al-Adab Fi Zabt Kalamat al-Arab*; 2) *Bayan al-Sana'at*; 3) *Daniel's Molhameh or Osul al-Malahem*; and 4) *Bayan al-Nojoom*. Examples of his Arabic works include 1) *Ekhtesar Fosul Boqrat*, 2) *Odieh al-Advieh*, 3) *Bayan al-Tasrif*, 4) *Tahsil al-Seheh Belsabab al-Sette*, 5) *Taqadam al-Alaj* and *Badraqal Menhaj*, and 6) *Al-Talkhis Fi Elal al-Quran*. His most important work is *Qanun al-Adab Fi Zabt Kalamat al-Arab*, a Persian dictionary in which 60 Arabic words are translated into Persian. This work is considered one of the earliest and finest Arabic-to-Persian dictionaries (Nazari, 2000, p. 30).

#### Medical Works of Hubaysh-i Tiflisi

Of Hubaysh's 28 known works, at least 14 books and treatises are devoted to medicine and pharmacology. One of his most significant medical contributions is the book *Kefayat al-Teb*, which, although written in Persian, is sometimes identified in references as an Arabic text. This medical encyclopedia was dedicated to Sultan Sanjar. It is organized into two main sections: the first addresses medical knowledge, health, and the treatment of diseases, while the second focuses on food, medical compounds, and the characteristics of various substances. Most surviving versions of *Kefayat al-Teb* are presented in tabular form. Due to its unique features, this work has held a prominent place in traditional Persian medicine since the 12<sup>th</sup> century. Some of these distinguishing characteristics are as follows (Nafisi, 1984, p. 128; Safa, 1984, p. 998):

- 1- The reliability of the information and quotes from different physicians.
- 2- References to the great Iranian, Greek, Roman, Arabic, and Indian physicians and their opinions.
- 3- Systematic presentation of medical information (including description of diseases and treatment methods).
- 4- Introduction to different foods and drugs.

Structurally, *Kefayat al-Teb* comprises three principal sections:

The first part provides comprehensive reviews and descriptions of diseases, along with their treatment methods. The second part covers simple foods and drugs, while the third part focuses on compound foods and drugs (Parsapoor, and Isfahani, 2009, pp. 3-7).

The first section of the work discusses the significance of medicine, knowledge of tastes and temperaments, human anatomy, symptoms of diseases, signs of recovery, the climates



of various cities, and the four seasons. This content is methodically organized in tabular format, with cross-referenced entries detailing disease etiology, clinical manifestations, and therapeutic protocols (Figure 4).

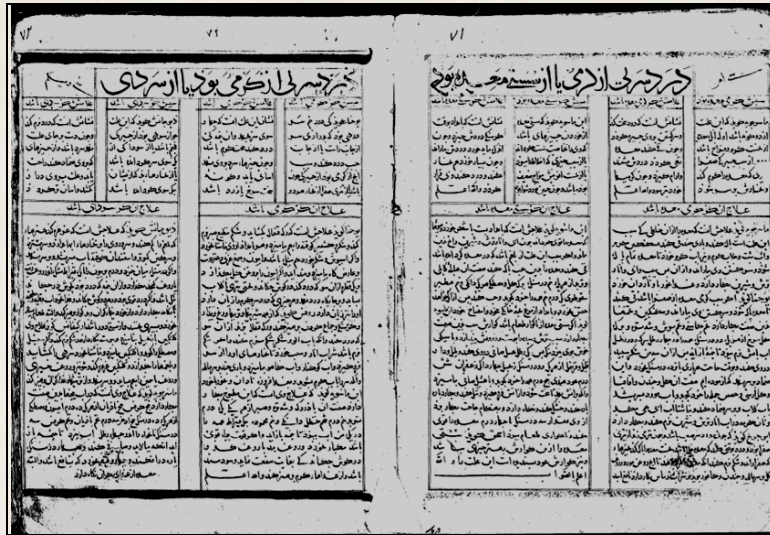


Figure 4. The introduction to diseases, causes, symptoms, and treatments in *Kefayat al-Teb* (Parsapoor, and Isfahani, 2009, p. 4)

In the second part of the book, the author lists the Persian and Arabic names of 661 simple drugs, providing a concise description of each in tabular format. While thorough in its enumeration, this pharmacopoeia demonstrates less comprehensive coverage of simple drugs, compared to the parallel section in *Taqvīm al-Adwiyah*.

The third part of the book discusses compound foods and drugs. This section presents the Persian and Arabic names of 705 drugs, their properties, and the required/recommended dosages.

The Persian version of *Bayan al-Teb*, originally composed of 20 chapters, lacks its final chapter. Additionally, textual analysis reveals a discrepancy between the number of diseases enumerated in the introduction and those actually treated in the main body. Stylistically, this work diverges from Hubaysh's other Persian compositions by exhibiting notably fewer references to established medical authorities—a characteristic that may reflect its incomplete state. The text selectively acknowledges classical figures (Aristotle, Hippocrates, and Galen) while conspicuously omitting prominent Islamic scholars such as Rāzī and Avicenna. Nevertheless, Hubaysh's terminological contributions remain significant: his text provides substantially more Persian medical lexemes than contemporary works like those of Jurjānī (Hubaysh-i Tiflisi, 2011, pp. 67-68).

The Nine Medical Theses: In the library of Princeton University, a 360-page manuscript, including nine Arabic theses, is introduced. This manuscript was penned in 1337-1338 C.E. in Golestan City (Caucasus) and is attributed to Hubaysh. These theses are as follows: *Taqadam al-Alaj va Tadarag al-Menhaj* (a thesis on medical principles); *Odiah al-Advieh* (on mixing, preparing, and using drugs) which is also known as *al-Daviah al-Mofrad va Keyfiah Akhzaha va Sighatha*; *Romooz al-Menhaj va Kanooz al-Alaj* (presents the names of diseases and symptoms and a list of practical prescriptions and drugs); *Al-*



*Resalah al-Mote'arefah be Asma-eha al-Moteradefah* (which is a medical dictionary); *Labab al-Asbab* (provides the definitions of diseases, causes, symptoms, and treatments); A Description of the Selected Problems from the Canon of Medicine (selected excerpts from the Canon of Medicine by Avicenna); *Tahsil al-Sehat be al-Asbab al-Settah* (on hygiene rulers); *Resalat fi Mayata'aloq be al-Aqziah al-Motlaqah va al-Davaeeyah* (on avoidances); *Ekhtesar Fosul Boqrat* (a summary of the Arabic translation of Hippocrates' Fosul) (Hubaysh-i Tiflisi, 1957, p. 280; Hubaysh-i Tiflisi, 1961, p. 9).

*Sehat al-Abdan* is a treatise on hygiene and medicine that Hubaysh mentions in the introduction to Kamel al-Tabir. Although Ismael Pasha Baghdadi refers to this work, no copies have been found to date (Bagdatli, 1992, p. 263).

*Taqvīm al-Adwiyah wa al-Qazāyā* is a pioneering multilingual medical encyclopedia authored by Sharaf al-Dīn 'Alī ibn Ṭarād ibn Muḥammad Zaynabī (1070–1144 CE), who served as vizier to the Abbasid caliphs al-Mustarshid (1118 - 1135) and al-Muqtafi (1136 to 1160). Written between 1128–1135 CE, this groundbreaking work is recognized as the first comprehensive medical compendium of its kind (Uzunçarşılı, 2001, pp. 1–2).

The encyclopedia's innovative tabular format systematically organizes pharmacological knowledge across several key dimensions. The tables in the first part of the encyclopedia list well-known simple drugs in multiple languages, including Arabic, Persian, Syriac, Roman, Greek, and Turkish. Additionally, the work provides descriptions of the pharmaceutical properties of these drugs, methods of administration, and references to authoritative physicians (Hubaysh-i Tiflisi, 1545, pp. 1–2) (Figure 5).

*Adviah Mofradeh va Morakabeh*, a 93-page Persian book on pharmacy was written in 1248 AD (Bavi, 2003, p. 5). *Mokhtasar Andar Elm Teb* is a medical book composed in both Persian and Arabic (Montasab Majabi, 2006, p. 352). It should be noted that another author named Zardgylm, a Jewish physician from Greater Khorasan, also wrote a book with the same title. This work is discussed in the article "Introduction of Manuscript: Mokhtasar Andar Elm Teb (Available in the Library of Leiden, The Netherlands)" (Farkhondehzadeh, Golshani, and Golshan, 2017, p. 87).

### Hubaysh-i Tiflisi's influence on physicians after him

Hubaysh-i Tiflisi should not be confused with Hubaish ibn al-Hasan al-A'sam, the niece and most prominent student of Hunayn ibn Ishaq al-Ibadi (808–873), who was a translator of medical texts from Greek into Arabic and Syriac and lived in Baghdad during the second half of the 9<sup>th</sup> century (Golshani, et al., 2014, p. 177; Mohammadi Nasab, Emadi, and Ghazi Sh'arba, 2018, p. 239). Hubaysh's medical works and ideas have had a profound impact on subsequent physicians, as evidenced by his name and the medicinal compounds he mentioned alongside great figures such as Avicenna, Galen, and Ibn Masawaih. His name and works appear in important medical texts including *Qanushah* by al-Jaghmini (d. 1221), *Tohfe-al-Momenin* by Hakim Momen Tonekaboni (17<sup>th</sup> century), *Qarabadin-i Kabir* and *Makhzan-ol-Adwiyeh* by Aqili Alavi Shirazi (1670–1747), and *Exir Azam* by Hakim Azam Khan Chishti (1814–1902) (Al-Jaghmini, 2010, p. 330; Tunakabuni, 2011, p. 562; Aqili Alavi Shirazi, 1844, p. 571; Aqili Alavi Shirazi, 1860, Vol. 1, p. 647; Hakim Azam Khan Chishti, 2008, p. 51). It remains uncertain whether the name "Hubaysh" mentioned in two significant medical works—*Kitāb al-Jāmi' li-Mufradāt al-Adwiya wa-l-Aghdhiya* by Ibn al-Baytar (1197–1248) and *Kitāb al-'Umda fi 'l-ġirāḥa*



by Ibn al-Quff (1233–1286)—refers to Hubaysh-i Tiflisi. However, given the extensive discussion of pharmacology in these texts, it is most likely that they refer to his lasting influence.



Figure 5. The introduction to the simple drugs in *Taqvim al-Adwiya* (Hubaysh-i Tiflisi, 1545, p. 4)

### Conclusion

The Anatolian Seljuk Sultanate’s strong support for scientists and scholars attracted many prominent figures, scientists, and physicians from various regions. Among the major Seljuk rulers, Kilic Arslan II stands out not only for stabilizing the political landscape of the Seljuk territories but also for fostering a vibrant cultural and literary environment at his court. His deep interest in culture and literature transformed his court—and those





of his children—into safe havens for poets, writers, and intellectuals. Kilic Arslan II actively promoted cultural and civilizational growth by constructing public cultural institutions throughout his realm. Hubaysh-i Tiflisi was one of the great medical figures bridging Iranian-Islamic civilization, Georgia, and Asia Minor. He introduced the sciences of medicine, astronomy, philology, and the Persian language to Anatolia. His scholarly works significantly contributed to the advancement of science in this region. Moreover, Hubaysh's medical and pharmacological writings influenced physicians in Iran, India, and other parts of the Islamic world, who frequently cited his works, underscoring his enduring importance in medical knowledge.

### Authors' Contribution

The authors confirm their contribution to the paper as follows: Conceptualization, Writing-Reviewing, Resources: Seyyed Alireza Golshani, Jamshid Roosta, Supervision: Jamshid Roosta. Validation and Editing: Babak Daneshfard.

All authors read and approved the final version of the work.

### Funding

None.

### Conflict of Interest

None.

### References

- Al-Jaghmini, M.M.U., 2010. *Qanunshah (Mulakkkhas; Summary of the Canon of Medicine)*. Edited by Nazim I. Tehran: Abge publishing.
- Aqli Alavi Shirazi, S.M.H., 1844. *Makhzan-ol-Adviyeh (Source of plants)*. Edited by Kabir A., Ahmad A., Maulvi Gh.H., Maulvi Q.A. India, Calcutta: Manuscript.
- Aqli Alavi Shirazi, S.M.H., 1860. *Qarabadin-i kabir*. Vol. 1. Tehran: Institute of Historical Studies, Islamic and Complementary Medicine, Medical University of Iran Press.
- Bagdatli, I.P., 1992. *Hadiyyat al- arifin asma al- muallifin*. Vol. 1. Beirut: Dar al-kotb al-Elmeyh.
- Bavi, S., 2003. *List of existing medical prescriptions in the Document Center of Iran Parliament*. Tehran: Iran University of Medical Sciences Publications.
- Cahen, C., 1968. *Pre-Ottoman Turkey*. Translated from the French by Jones-Willims J. London: Sidgwick and Jackson.
- Cahen, C., and Holt, P., 2000. *The Formation of Turkey; The Seljukid Sultanate of Rūm: Eleventh to Fourteenth Century*. London, New York: Longman.
- Farkhondehzadeh, M., Golshani, S.A., and Golshan, E. 2017. Introduction of Manuscript: Mokhtasar Andar Elm Teb (Available in the Library of Leiden, The Netherlands). *JRHM*, 6(2), pp. 87-98.
- Felsofalduleh, A.M., 2004. *Matrah- ai-anzar: fi trajeme atebba*. Tehran: Iran University of Medical Science Publication.
- Golshani, S.A., Pirouzan, H., Zargaran A., Daneshfard, B., 2014. An Overview of Alexandria School in Flourishing Islam and Iran's Medical Knowledge. *Jiitm*, 5(2), pp. 169-179.
- Haji Khalifa, M.A., 1967. *Kesf -el-Zunun Birinci all Katib Celeb*. Vol. 2. Tehran: Islameyh va Jaffari Tabrizi.



- Hakim Azam Khan Chishti, M., 2008. *Exir Azam*. Vol. 1. Tehran: Institute of Historical Studies, Islamic and Complementary Medicine, Medical University of Iran Press.
- Hubaysh-i Tiflisi, K.A., 1545. *Taqvim al-Adwiya*. [Manuscript] Collection: Medicine/Drugs. No 1393.04.04784/011. Held at: Tehran: Malik National Museum and Library of Iran.
- Hubaysh-i Tiflisi, K.A., 1957. *Bayan al-Sanaeaat*. Introduction by Afshar, I. Tehran: Afshar.
- Hubaysh-i Tiflisi, K.A., 1961. *Wujuh-i Qur'an*. Introduction by Mohaghegh M. Tehran: University of Tehran.
- Hubaysh-i Tiflisi, K.A., 2011. *Bayan al-Tebb: Old Persian medical textbook*. Corrected by Seyed Hossein Razavi Borghei. Tehran: Nashre Ney.
- Husseini, A.N., 1984. *Akhbar al-Dolat al-Saljoqeyat*. Corrected by Eghbal M. Beirut: Manshorat Dar al-Afagh al-Jadideh.
- Ibn al-Baytar, A.A., 1992. *Kitāb al-Jāmi' li-Mufradāt al-Adwiya wa-l-Aghdhiya*. Vol. 1. Beirut: Dar al-Kutub al-Elamiya.
- Ibn al-Quff, A.Y., 1938. *Kitāb al-'Umda fi 'l-ġirāḥa*. Vol. 1. Hyderabad: Majlis Dayerat al-Maaref Al-Ottomaneyat Al-Kaynat.
- Kahhalah, U.R., 1957. *Mu'ğam al-mu'allifin*. Vol. 3. Damaskus: Matbaeh Al-Teraghi.
- Mohammadi Nasab, R., Emadi, A., and Ghazi Sh'arbaaf, J., 2018. The Place of Hobeish Ibn Hasan Asam Treatise on the Side Effect and Preparation of Drugs in the Pharmacological Tradition of the Islamic Period. *JRHM*, 7(4), pp. 237-246.
- Montasab Majabi, H., 2006. *Study of Shiite Medicine in Medical History*. Kermanshah: Razi University.
- Nafisi, S., 1984. *The history of poetry and prose in Iran and in Persian language*. Vol. 1. Tehran: Foroughi Bookstore.
- Nazari, J., 2000. Byzantine works of Persian literature in the seventh century. *J Literature and Philosophy Book of the Month*, 39, pp. 28-33.
- Parsapoor, Z., and Isfahani, M., 2009. Kefayat-al-teb, an ancient treasury of East and West. *Iranian J Medical Ethics and History of Medicine*, 3, pp. 1-8.
- Peacock, A.C.S., and Nur Yildiz, S., 2013. *The Seljuks of Anatolia Court and Society in the Medieval Middle East*. London: LB.Tauris & Co L,d.
- Riahi, M.A., 1981. Tiflisi, the scout of Farsi writing in the land of Rome. *Iranian J Future*, 9(8), pp. 620-625.
- Safa, Z., 1984. *A History of Iranian Literature*. Vol. 2. Tehran: Ferdowsi.
- Shokr, M., 2006. *Fetihlerle Anadolu'nun turklesmesi ve islamlasmasi*. Translated by Salehi N. and Ertuğrul A. Tehran: Nashr Adyan.
- Turan, R., 1995. *Türkiye Selçukluları'nda Hükümet Mekanizması*. İstanbul: MEB.
- Tunakabuni, M.M., 2011. *Tohfe- al- Momenin*. Vol. 1. Qom: Noor-e-Vahy.
- Uzuncarsili, I.H., 2001. *Osmanili Tarihi Ismail Hakki Uzun carslil (The Ohoman History)*. Translated by Nobakht E. Tehran: Keyhan.

