

ORIGINAL ARTICLE


A Contemplation of the Geographical Origin of *Seyyed Isma'il Jurjani*

Abstract

Isma'il Ibn Hassan Ibn Mohammad Ibn Ahmad-e-Hosseini, known as *Seyyed Isma'il Jurjani* (1042-1137 AD) is a renowned physician of Iran and the Islamic world in 11-12 centuries. Although considerable research is conducted on him and his scientific achievements, a clear picture of his geographical origin and place of residence is not given mainly because of the similarity existing between the names of the two cities in the region of Jurjan or Gorgan city (Jurjan) and the other in the Chorasmia (Khwarazm) region (Urgench city). Also, based on linguistic evidence, Urgench shows the real birthplace of this great scientist in Transoxiana and Khwarazm. The present article aims to provide a clearer picture of the geographical origin and the environment of *Jurjani's* life according to historical, geographical, and linguistic evidence. Based on the findings of this article, *Jurjani* belonged to Jurjaniyeh (Urgench) in the Chorasmia region and his assignment to the Gorgan region (Jurjan) is not consistent with historical evidence.

Key words: *Seyyed Isma'il Jurjani*, Chorasmia (Khwarazm), Jurjan, Physicians, Zakhireye Khwarazmshahi, Geography, Persian Language, Iran

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Introduction

Many Iranian scientists have changed the history of medicine in the world, among whom is *Isma'il Jurjani*, considered as an inventor of writing medical summary books and the history of medicine in Iran and the world. He was the first person who wrote a medical textbook in Persian, translated his medical books into Arabic, the international language of the day, and was also the first creator of many Persian equivalents for medical terms (Kalantar-Hormozi, 2012, pp. 1-3; Mohammadi Fesharki, and Nasri, 2010, pp. 98-99).

Before *Hakim Jurjani*, some other scholars, such as *Abu-Bakr Rabee Ibn Ahmad Al-Akhawyni Bokhari*, had also written a book in Persian on medical sciences (Mohammadi Fesharki, and Nasri, 2010, p. 99). However, *Hakim Jurjani* was more influential than other historians, resulting in medicine being taught in Persian. That's why some historians have considered *Jurjani* as the inventor of Persian writing in medical works (Zakir, 2006, p. 164).

Zeyn al-Din Abu Ibrahim Isma'il Ibn al-Hassan Ibn Mohammad Ibn Ahmad al-Hosseini, known as *Seyyed Isma'il Jurjani*, with different titles and nicknames, such as *Zeyn al-Din*, *Sharaf al-Din*, *Abu Ibrahim*, *Abu al-Fath*, *Abu al-Fadha'il*, *al-Amir al-Seyyed al-Imam*, *Alavi Hosseini*, *Sepahani Gorgani*, and *Tabib Alavi*, was born in Jurjanieh (Gorganj), on the left bank of the Amu Darya (Jayhoun) and the capital of Khwarazm, in 434 AH (1040 AD) and passed away at the age of 97 in 531 AH (1137 AD) in Marv city in northeastern Iran. However, based on some other references, he was born in 1042 AD and passed away at the age of 94 or 95 (Golshani, 2014, p. 70; Elgood, 2007, pp. 247-248; Nayernouri, 1998, p. 79; Shamsardekani, 2010, pp. 35-37).

Statement of the problem

Seyyed Isma'il Jurjani is known as one of the great people in the history of medicine in Iran. Some writers in the field of medical history have mistakenly considered *Seyyed Isma'il Jurjani* as a citizen of Gorgan city; however, according to some available documents, he is identified as Sadat of Isfahan. Even in the "Congress in honor of *Hakim Seyyed Isma'il Jurjani*" in 2002 at the Academy of Medical Sciences of the Islamic Republic of Iran" (Moatar, Shams-Ardakani, and Mossadegh, 2002, pp. 1-891), and "National Conference of *Hakim Seyyed Isma'il Jurjani*" in May 2017 at Islamic Azad University of Gorgan and also in the many encyclopedias like Iranica (Hušang, 2012, pp. 29-30), or citations made by Edward Granville Brown (Browne, 1921, p. 98), Dr. Cyril Lloyd Elgood (Elgood, 2007, p. 97), Dr. Mahmoud Najmabadi (Najmabadi, 1973, pp. 714-715), Dr. Hassan Tajbakhsh (Tajbakhsh, 2000, p. 79), and Dr. Ali-Akbar Velayati (Velayati, et al, 2010, p. 140), *Hakim Seyyed Isma'il Jurjani* is regarded as a citizen of Gorgan, the capital of Golestan Province, Iran. Gorgan lies approximately 400 km (250 miles) to the northeast of Tehran, some 30 km (19 miles) away from the Caspian Sea. (Borjian, 2008, p. 681).

In this paper, by providing strong evidence, we are going to resolve these ambiguities made about *Seyyed Isma'il Jurjani's* birthplace. Therefore, the purpose of this study is to specify the exact place of birth and life of *Hakim Jurjani* and to prove the correct place of his residence.



Method

The method used in this research is reviewing books and historical documents. Based on available resources, we will review the place of birth, life, and works of *Seyyed Isma'il Jurjani*.

Geographical origin of Jurjani

In many historical sources, “Gorgan” and “Gorganj” are mistakenly considered as names introduced as Jurjan because of mispronunciation. However, ancient Gorgan was located in northern Iran, south of the Caspian Sea, and 80 km east of the center of Golestan province, which was formerly called Esterabad (Golshani, 2014, p. 70; Matofi, 2008, p. 12).

In the book *Nozhat al-Qulub*, from the pre-Islamic era until the reign of the Ziyarid dynasty (931-1090 AD), Hamdollah Mostofi Qazvini, who was an Iranian historian and geographer of the thirteenth and fourteenth centuries AD, mentioned that Gorgan as the political and administrative center of Tabarestan was very populous; however, during the Buyid dynasty (932-1055 AD), due to the outbreak of cholera and war, the population of this region dramatically reduced and finally the remaining people were massacred by the Mongols. In addition, during Mostofi's era, only the ruins remained (Mustawfi Qazvini, 1913, p. 197). Therefore, it seems unlikely that *Seyyed Isma'il Jurjani* was a citizen of Gorgan and studied science in this region during the Seljuq (1037-1194) and Khwarazmian dynasty (1019-1219 AD). The people of Khwarazm call it “Gorganj” in their local language, which is the name of the center of Khwarazm and a large city on the coast of Jeyhun (Jurjaniyeh is Arabicized).

Yaqut al-Hamawi (1179–1229 AD) had visited Gorganj before the arrival of the Tatars and its destruction in 1219 AD and described Gorganj as a large, beautiful, and scenic city (Yaqut al-Hamawi, 2001, p. 36). (Figure 1).

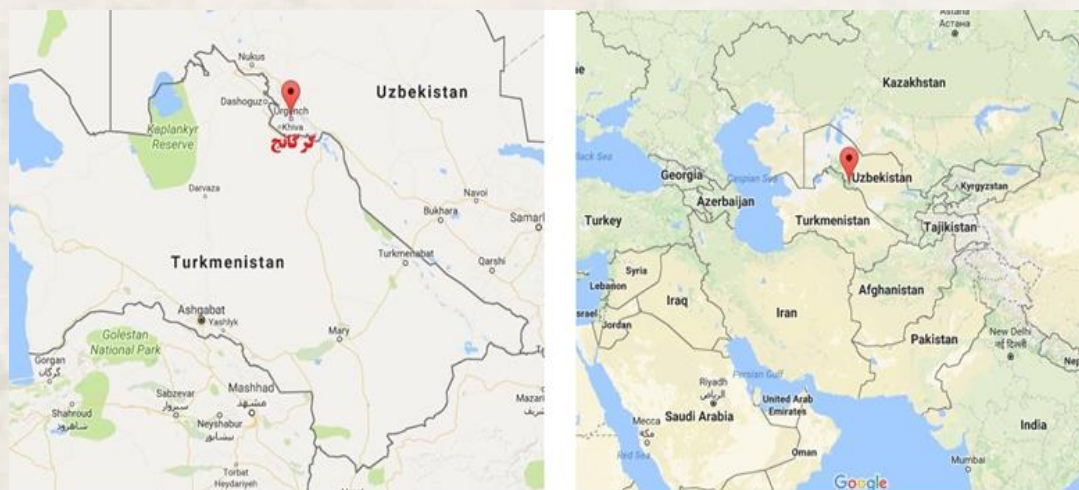


Figure 1: Map around Gorganj; Available at: <https://www.google.com/maps/place/Urgench> (Accessed 17 August 2021)

Contrary to the claims of Cyril Lloyd Elgood and Dr. Ali Akbar Velayati, stating that he was originally from Isfahan (Elgood, 1978, p. 8; Velayati, et al, 2010, p. 140) because of



the title of Sepahani assigned to him, he was a military doctor. This can be deduced from chapters in some of his books devoted to the study of cavalry wounds, skin injuries, and war wounds (Jurjani, 2002, p. 197; Jurjani, 2012, Vol. 7, pp. 102-104).

Jurjani started his primary education in his hometown (Gorganj) and in various sources, he called Gorganj “my city” and wrote about the plants or diseases of the people of Gorganj, considered as evidence testifying Gorganj’s birthplace. *Jurjani* lived in Rey, Shiraz, Fergana, and Neishabour for a period of time and studied under the direction of medical professors. He also lived in Qom and met the disciples and survivors of Kushyar Gilani (971–1029 AD), but lived most of his life in Khorasan and studied under the supervision of Khorasan scholars. *Jurjani* learned medicine from *Ibn Abi Sadiq al-Naishaburi* (995-1077 AD), known as the second Hippocrates, a student of Avicenna, and hadith from *Al-Qushayri* (986-1072 AD). Thus, he learned medicine indirectly from Avicenna and was a student of Abu Mozar Dhabī (1113 AD) in Khwarazm (Khaledpour, 1996, p. 509; Tadjbakhsh, 2011, p. 63; Golshani, 2014, p. 69).

Despite the claims of many historians, who considered him a native of Gorgan, at that time, this land was a part of the Seljuk dynasty with an anti-rational approach due to the policies of *Nizam al-Mulk Tusi* in establishing Nizamiyyah institutes throughout its territory that was noticeably seen in Ghazali’s approach which rejected intellectual and experimental sciences in his teaching and writings. Philosophy and medical science were strongly repudiated and the intellectual and experimental sciences were severely suppressed (Yousefi, 2009, pp. 183-5; Nizam al-Mulk, 2004, p.129; Al-Ghazali, 2003, pp. 82-93). Therefore, one cannot expect Ismail Jorjani to have had the opportunity to grow scientifically in Gorgan.

In the twelfth century AD, Gorganj gained new importance as the capital of the powerful dynasty of the Khwarazmian dynasty. Since this dynasty was promoted to the largest royal family in the Islamic world, it could access the treasures of all the lands conquered, making the Islamic world the center of science and knowledge.

At the age of 25, he moved to Royal Palace Gorganj (the capital of Khwarazm) and served *Sultan Qutb al-Din Mohammad Ibn Yamin al-din Takesh Khwarazmshahi*, king of Khwarazm (1110 AD) whose court in Jurjaniyeh was a gathering place for scholars. The king praised him as the head of the pharmacy, the medical center of Khwarazm, and the Baha al-doleh hospital of Khwarazm with a salary of a thousand dinars a month. In this city, the manager of the hospital was called Timardar (lit. treating patients) (Tadjbakhsh, 2000, pp. 77-78; Foroozani, et al, 2017 , p. e67444.). At the same time, *Jurjani* ran the hospital, treated patients, and conducted research in medical sciences, culminated in compiling the *Zakhireye Khwarazmshahi* in that year. He mentioned his busy schedule, including the hospital administration, as the reason for the delay in publishing his book (Tadjbakhsh, 2000, pp. 77-78; Golshani, 2014, p. 69). During the last years of his life, he was studying and trying to learn new topics. For instance, at the age of 90, he went to the court of Sultan Ahmad Sanjar of Seljuk (1097-1157 AD) in order to use the great royal library of Marv city and passed away in 1137 AD at the age of 97 in the same city (Golshani, 2014, p. 69; Elgood, 2007, p. 248).

The origin of Sogdian and Khwarezmian languages in *Jurjani*’s works

Sogdian and Khwarezmian languages had different isogloss boundaries from other



middle and modern Iranian languages in that the two languages in the circle of Iranian languages had a close link with the Dari language. However, many striking similarities existing between Sogdian and Khwarezmian languages can be attributed to the presence of words that later entered the Persian language (Zarshenas, 2012, p. 305). Manuscripts and books related to the Islamic era in Arabic script are related to the twelfth to fourteenth centuries and works, such as "*Yatimah al-Dahr fi fatawi ahle al-asr*", written by *Mahmoud bin Mahmoud al-Maleki Khwarezmi*, "*Ghaniyat al-maniyat li totayyem al-ghaniat*", written by *al-mukhtar al-zahi*, "*Risalat al-alfaz al-khwarezmiyeh allati fi ghanitat al-maniyat*" by *Kamal al-Din Al-Emadi Al-Jurjani* and a dictionary entitled *Muqaddimat al-Adab* written by *Al-Zamakhshari*, Kharazmi words in Arabic, Persian, and Turkish meanings and descriptions, and all these books had some Sogdian and Khwarezmi words (Mansoori, 2008, pp. 9-13). Many words and idioms and sometimes astronomical expressions are in *Al-Biruni's* works, such as "*al-Āthār al-bāqiya*", a chapter related to celebrations, letters, days and months of the year with historical terms. Also, "*Kitab al-Tafhim*" and "*Kitab al-saydani fi al-tibb*" have Sogdian and Khwarezmian words (Mansoori, 2008, pp. 9-13).

Seyyed Ismail Jurjani can also be considered as one of the first scholars to use the Sogdian and Khwarezmian language words in his Persian works, such as *Al-Biruni* (973-1048 AD) and *Muhammad ibn Mūsā al-Khwārizmī* (780-850 AD). In the works of *Jurjani*, traces of Sogdian and Khwarezmian words can be also found. In the books by *Al-Khofiyya Al-Ala'iyya*, *Zakhireye Khwarazmshahi*, *Al-Khofiyya Al-Ala'iyya*, and *Yadegar*, more than five hundred words with Dari, Sogdian, and Khwarazmi Persian roots were observed (Golshani et al, 2018, p. 75).

Independent and dependent words coming from Sogdian and Khwarezmian languages into Persian, several famous Sogdian words in the three books *Al-Khofiyya Al-Ala'iyya*, *Zakhireye Khwarazmshahi*, and *Yadegar* are mentioned here. Sogdian words, such as Ägāz beginning, Äsma rush, Barx or Barxe some, Taranj bergamot, Xaduk anger, Sār as a suffix in compound words, Fām as a suffix at the end of some compound words, Zywar ornament, Kant or Kand as a suffix meaning village, Mull wine, Malax locust, Nughreh silver, and Nuk tip were also cited (Jurjani, 1990, pp. 5-231; Jurjani, 2002, pp. 7-228; Jurjani, 1966, pp. 78-652; Jurjani, 2012, Vol. 7, pp. 16-96; Elahi, 2010a, p. 110-115).

Also, some of the words that entered the Persian language from the root of Khwarezmi-an language are garden; β'γk, religion; δyn, grief; xoysm, Khorasan; xoysanē, seven; hft = haft, daughter; δywt, man; mrc (Jurjani, 1990, pp. 2-252; Jurjani, 2002, pp. 24-372; Jurjani, 2012, Vol.7, pp. 5-147; Jurjani, 1966, pp. 7-714; Elahi, 2010b: 119-120).

However, the research conducted on *Jurjani's* works exhibited no traces of the Gorgani dialect or even Mazani and Tabarestani dialects. Based on linguistic evidence, Urgench showed the birthplace of this great scientist in Transoxiana and Khwarazm.

Evidence from *Hakim Jurjani's* books written in Khwarazm

Seyyed Isma'il Jurjani was quietly proliferated in medical sciences, philosophy, logic, and theology, and these works were dedicated to the dynasty of Khwarazmian Kings, examined, as shown below:

1- *Zakhireye Khwarazmshahi* (storage in medicine)



Zakhireye Khwarazmshahi is the most important and valuable medical work of Seyyed Isma'il Jurjani in Persian. He employed many words and their combinations in the Persian language to elaborate medical terms, demonstrating the richness of this language to incorporate different sciences, including medicine. *Jurjani* followed the general guidelines of the period to author scientific books. Instead of Arabic words, he used Persian words in his writings (Safa, 2000, pp. 944-945).

Zakhireh was written in twelve volumes, encompassing all topics of medicine, anatomy, health, and herbal drugs. In the introduction, the author mentioned the reason for writing the book during the reign of Qutbuddin Mohammad Ibn Anushtakin Khwarazmshah in 1110 AD (Jurjani, 2012, Vol. 1, p. 5) and his living conditions in the land. The book was called "*Zakhireye Khwarazmshahi*" after the name of that king. He also mentioned the weather of Khwarezm and the cause of many diseases in that land (Safa, 2000, pp. 944-945). *Zakhireh* is a medical encyclopedia in which almost all the knowledge of Islamic medicine up to the fifth and sixth centuries were compiled as a ten-volume book in almost half a million words in the Persian language. Thus, this book was considered as one of the most important sources for medical students from the fifth century to the Safavi period (Browne, 1987, p. 46; Frye, 1975, p. 418).

The importance of *Zakhireye Khwarazmshahi* is not only its contents but also its delicate, concise language used in elaborating the medical science that was taught at that time. *Jurjani* offered the same service to the Persian culture as the Bible did to English prose. By compiling this great medical encyclopedia, he appropriately established the names and technical terms of medicine. The phrases and idioms adapted from the Arabic books of *Rhazes* and *Avicenna* were later incorporated into the scientific language of Persian for later writers. After the books and medical treatises of *Rhazes* and *Avicenna*, this book was consulted and adapted more than any other medical book in the school of Islam and became popular as quickly as the book of the *Canon*. This book was also translated into Urdu and is still used by Indian sages (wises) (Montasab-Mojabi, 2006, pp. 131-132; Frye, 1975, p. 418.).

2- *Al-Khofiyya Al-Ala'iyya*

The other book written by Seyyed Isma'il Jurjani is the "*Khofi Ala'i*" or "*Al-Khofiyya Al-Ala'iyya*" or "*Selected Zakhireye Khwarazmshahi*" in two small volumes, presented to *Ala ad-Din Atsiz Khwarazmshah* (1127–1156) in 1113 AD. *Al-Khofiyya Al-Ala'iyya* summarized the writing and the most important contents of *Zakhireye Khwarazmshahi* (Safa, 2000, p. 946; Jurjani, 1990, p. 1).

3- *Al-Aghraz al-Tebbiyya wa al-Mabahith al-Ala'iyyah*

Al-Aghraz al-Tebbiyya is a more detailed summary of *Khofi al-Ala'i*, the last book, compiled at the end of his life in 1127 AD in Urganj city, at the request of *Majdaldin Abu Mohammad Sahib bin Mohammad al-Bukhari*, who was the minister of *Ala 'al-Dawlah Atsiz* (Wasti, 2003, p. 100; Hossini-Monshi, 2006, p. 198; Jurjani, 1966, p. 3).

4- *Fi al-hefz al-sehhe*

This is short treatise on medicine written in Persian in 16 chapters.



5- *Zobdat al-tebb*

This manuscript, dated 1611 AD, consists of Persian and Arabic narrations. Now, it is in the National Library of Paris under practical medicine in five sections. This book was written by *Jurjani* for *Ala 'al-Dawlah Atsiz* (Erfanian, 2001, p. 260).

6- *Yadegar*

“*Yadegar*” or “*Yadegar Teb*” is the other important work of *Jurjani* in medicine and pharmaceuticals, compiled in Khwarazm for *Ala 'al-Dawlah Atsiz* (Mousavi-Bojnourdi, 1988, pp. 706-707; Qasemlu, 1996, pp. 168-169; *Jurjani*, 2002, p. 7).

7- *Tadbir al-Yawm wa al-Layla*

“*Tadbir al-Yawm wa al-Layla*” is a collection in Arabic containing medical advice in public health and protection of the body from diseases that every person should follow day and night. This book was presented to Judge *Abu Sa'id Ahmad al-Ash'ari* or a *Sharei* in Khwarazm, as written in *Zahir al-Din Beyhaqi's* book, but no copy of *Tadbir al-Yawm wa al-Layla* was found (Mousavi-Bojnourdi, 1988, pp. 706-707; Qasemlu, 1996, p. 168; Sa'adat, 2005, p. 503).

8- A book on the science of anatomy

It is a short Persian treatise on the science of anatomy and medicine. According to El-good, it is just an adaptation of *Jurjani's* *zakhirah* (Browne, 1987, p. 46).

9- *Tazkerat al-ashrafiyyeh fi al-senaat al-tebbiyye*

It is also a short Arabic treatise on medical knowledge (Mousavi-Bojnourdi, 1988, pp. 706-707).

10- *Al-Zinat* book

A book about health, hair beauty and cosmetics.

11- The Book of Poisons

This book consists of six articles (Erfanian, 2001, pp. 264-265). *Jurjani's* other non-medical works were all written in Khwarazm, according to *Abolhassan Beyhaqi* including the following:

“*Fi al-Qiyas*” in Aristotelian logic and “*Fi al-Tahlil*” are about analysis. The copies of these two books, written in 667 AH, are found in the Escorial Library. The history of Islamic sages has mentioned the name of another book from *Jurjani* “*Al-Rad ala Al-Falasaifa*” which is about rejecting the knowledge of philosophy. However, no copy of this book is available. (Qasemlu, 1996, p. 168; Sa'adat, 2005, p. 503; Agha Bozorg Tehrani, 1983, pp. 10-11; Bayhaqi, 1964, p. 172.).

Conclusion

Seyyed Isma'il Jurjani, an Iranian medicine scholar, philosopher, and scientist was born in the city of Gorganj in Khwarazm (a province in the western part of the present-day Republic of Uzbekistan) which was one of the centers of medical science in the world



during the Khwarazmian dynasty (491-616 AH). It was then politically part of Iran. Although Khwarazm is not currently part of Iran politically and geographically, this distance never separated the intellectuals and scientists of that land from those in Iran. The land has always been an important part of the history, culture, and civilization of Iran and the birthplace of medical knowledge in the Persian language. Many scholars of contemporary medical history have erroneously written the Arabic pronunciations of “Gorgan” and “Gorganj” and equated the two cities, leading to the incorrect presentation of *Seyyed Isma'il Jurjani* as a native of ancient Gorgan in the southeastern of the Caspian Sea: Khwarazm. The same mistake has been witnessed in congresses, conferences, and even in academic and scientific centers in Golestan province under the name of *Seyyed Isma'il Jurjani*. Some articles mistakenly mentioned Gorgan as his birthplace. Based on the book and his works in the field of medical science and the language used in these works, i.e., Persian Dari, Khwarazmi, and Sogdian specific to Transoxiana and Khwarazm, one can also find the real origin of this scholar. Also, by writing an encyclopedia, *Zakhir-eye Khwarazmshahi*, along with his other works, such as *Al-Khafi Al-Ala'i*, *Al-Gharaz Al-Tabiyyah*, and *Al-Mubahis Al-Alaiyyah*, *Zabda Al-Tib*, *Yadegar*, *Tadbir Al-Yawmah wa Al-Layla*, *Kitab Al-Hafiz Al-Sahha*, he made his knowledge publicly available in the name of the rulers of Khwarazmshahi, which is another proof that he was from Choras-mia (Khwarazm).

Conflict of Interest

None.

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