ORIGIPAL ARTICLE

The Sabians of Harran's Impact on the Islamic Medicine: From Third Century to the Fifth AH

Abstract

Various factors have been involved in the growth and flourishing of Medicine as one of the most important sciences in Islamic civilization. The transfer of the Chaldean and Greek Medicine tradition to Islamic Medicine by the Sabians of Harran can be regarded as an essential element in its development in Islamic civilization. The present study seeks to investigate the influence of Sabians of Harran on Islamic Medicine and explore the areas which provided the grounds for the Sabians of Harranon Islamic Medicine. It is also an attempt to find out how they influenced the progress of Medicine in Islamic civilization. A descriptive-analytical method was adopted on early sources and later studies to answer the research questions. The research results indicated that in the first place, factors such as the Chaldean Medicine tradition, the culture and Medicine of Greek, the transfer of the Harran Scoole Medicine in Baghdad were the causes of the flourishing of Islamic Medicine. Then, the caliphs and other officials' treatment through doctors' examinations had contribution to the establishment and administration of hospitals, while influencing the process of medical sciences in Baghdad and other parts of the Muslim world, thereby helping the development of this science in Islamic civilization.

Key words: The Abbasid Caliphate, Islamic Medicine, Sabians, Harran, Qurra and Zahroon Family

Received: 1 Apr 2019; Accepted: 16 Apr 2019; Online published: 20 May 2019 Research on History of Medicine/ 2019 May; 8(2): 97-114. Reza Afsharisadr¹^o Mohammadali Chelongar²^o Mostafa Pirmoradian³

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Citation:

Afsharisadr R, Chelongar M, Pirmoradian M. The Sabians of Harran's Impact on the Islamic Medicine: From Third Century to the Fifth AH. *Res Hist Med*. 2019;8(2):97-114.

Introduction

Medical science has been of interest for human beings from the ancient time. Due to the significance of this field of science in the diagnosis of diseases as well as the emphasis of Islam on health and hygiene, medical sciences enjoyed the most pronounced progress in Islamic civilization. Ibn Hindu defined medical science as "the occupation that addresses human bodies, upon which it aims to bring health and wellness." He proceeded with a philosophical argument about medical science, being the noblest one. According to him, since man is the most honorable creature, his body, which is the subject of medical science, is the most respected of the bodies. As a result, the medicine is the noblest of the science fields.¹ Medical science is divided into two categories of theoretical and empirical practices. One who only excelled in empirical practices was called an empiricist while the person whose education covered both the theoretical and empirical studies was considered a physician.² From Segzin's point of view, the most important aspect of Islamic medicine which must be recorded as a victory for Muslims is the Muslims' abilities in the recognition of both theoretical and practical aspects of medicine and creating a balanced relationship between them from the early days of its practice to its gradual completion. The objective representation of Muslim supremacy in theoretical medicine implies that they were the founders of this medicine, especially in case of eye medicine.³

In the development and prosperity of medical science as one of the most important Islamic sciences, various factors have been involved. Muslims knowledge of medicine was used for the Greeks, Srians, Iranians, and Indians; in the meantime, they took the most influence from Greek-Syriac medicine. In fact, the transfer of Greek and Sardinian medical traditions through centers such as Jundishapur and Harran can be an essential factor in the development of this science within the realm of Islamic culture. The Muslims returned the medicinal effects of Hippocrates, Galen and Aaron of Alexandria to Arabic. Renan believed that Muslims' medical culture owed to Galin's work.⁴ But, Ulri Islamic medicine was influenced by the works of Aaron Alexander.⁵ Yet, Islamic medicine cannot be attributed to a particular person or tradition because medicine in Islam is a synthesis of ancient Greek traditions, medical theories in Iran, India and ancient China, based on which the theoretical and practical foundations of Islamic medicine was made.

Most historians have noted that the paramount achievements of Islamic medicine are in the field of pharmacy and formularies preparation, hospital establishment and services Ibn Hendo, 2014: 19, 21.
 Leyzer, 1986: 69-70.
 Sezgin, 1991: 48,53.
 Renan, 1987: 326.
 O'Leary, 1963: 58.

to patients (especially psychiatric ones), knowledge organization practices, and the training of eminent scientific individuals. These were undoubtedly in line with the scientific paradigms accepted by Islamic societies and supported by the system characterized by mores, freedom of expression and action, unlimited interactions, and eventually, the participation of Muslims and non-Muslims alike.6 Regarding the focus of this paper, one should mention that vast Islamic lands accommodated residents of various religions, such as Christians, Jews, star-worshipping Sabians, who, despite their different beliefs and viewpoints towards medical science, treatments, and sources of diseases, did not encounter any obstructions in their medical activities, so that their undeniably significant contributions have astonished the researchers. Therefore, it is expected that the Muslims did not have the opportunities to gain expertise in medicine and were consequently isolated. The list of the renowned physicians of the third century AH, stated in the book of Ibn Abi Osaybae, revealed there were 130 Christian, three Jewish, and three pagan (probably Sabians) physicians while there were only five Muslim counterparts.⁷ It is worth mentioning that over time, the number of non-Muslim physicians declined, and guild-related conflicts began to emerge in the form of religious challenges among physicians.

Numerous historical essays have been written about Sabians⁸ lately, which, chiefly, concentrated on their religious viewpoints. Some of these studies touched upon their medical practices. Shirali devoted a chapter in his book named Harranians to the Harranian Sabians, where he also mentioned the physicians. Elcoc attempted to introduce the important figures as well as the works of the physicians of Sabians in the role of Harranian Sabians in Islamic civilization. Another precious related work is Al- Sabeat menz zohur Islam hatta soghut al-khalafat, written by Aladavi. The author provided a helpful discussion about Sabian physicians in the chapter on natural sciences. As evident from the titles, there are rarely any essays in Islamic research focusing on this topic exclusively. This paper aims to discuss the impacts of Harranian Sabians in Islamic medical science in order to clarify their contributions to Islamic civilization.

The underlying basis of Harranian Sabians' rise in Islamic medical science

There seem to be numerous factors that collectively led to the rise of Harranian Sabians in Islamic medical science as follows:

6- Mayerhof, 2018: 14-15.

7- Mohaqeq, 1995: 307-308. 8- There are two types of Sabians, namely Mandaeans and Harranian. Their antecedents were followers of the religion of ancient Egypt. They migrated to Jerusalem, but were forced by Jews to leave Palestine to Harran. They subsequently migrated to the south of Iraq and Khuzestan province of Iran (Adavi, 2002: 85; Hetti, 1957: 455). Harranian Sabians, called pagan Sabians, are related to city of Harran (Birooni, 1939: 226). The residents of this city pursued their antecedents' religion until the seventh century AH (Browne,

1985: 60).

1- Chaldean medical traditions

Medicine, as a field of science, was originally affected in the city of Harran⁹ by Chaldean medicine as Chaldeans partially populated this city.¹⁰ Jurji Zaydan regarded medical science as one of the fields that Chaldeans initially laid its foundation by probing into the disease treatments, and later the other nations borrowed from them.¹¹ Chaldean physicians used the root of Vervain plants or tree leaves to cure diseases and considered the evil spirits as the source of all of the illnesses. They placed the patients on the passing roads of the public in order for the passers-by to be affected by the illness in an attempt to find the cure for the disease. They would then write the treatment instruction on a tablet and hang it in the temples. Chaldean ministers functioned as physicians.¹² Harranian Sabians also used this technique to treat patients. They used to believe that the healing of the ill was through the temples and its ministers and the good, dreams, and inspirations.13

2- Greek culture

The origin of Greek culture goes back to old oriental civilizations in Alexandria of Egypt, Antioch, Roha and Harran. During the Abbasid era, it was transferred from the Greek form to the East. Greek culture was then transferred to the Islamic world through the translation of philosophical texts and various experimental sciences.

One of these important Greek centers which played a significant role in the link between Greek and Islamic culture, functioning as a communication bridge between the Greek and Syriac civilizations is the city of Harran.¹⁴ Given the fact that Harranian Sabians used to inhabit Greek-populated regions, they considered themselves inheriting the ancient Greek civilization and were known for having a semi-Greek culture¹⁵, which they tried hard to revive. Due to the fact that the exquisite Greek culture persisted in Harran for a long time, the city was called Hellenopolis i.e. the Greek city.¹⁶ To shed light on the impacts of Greek medicine on Harran, one can seek the Greek physicians with the title 'Harrani (Harranian)' in their name. Ibn Abi Osaybae mentioned numerous physicians, in the ancient Greek medicine time (i.e. the time between Hippocrates and Galen) in making drug combinations. Galenus is one of those in the book of Fifi Al-Mufrada The Geyman Harrani and Tamur Harani among these doctors.17

He then named nineteen other physicians from the time of Galen to Alexandrian physicians, entitled Alexandria after their city. The tenth name of the list belonged to Astafan 9- The city is located in the North East of Mesopotamia in the island region (Hamavi, 1995: 30).
10- Esfahani, 1967:3
11- Zeydan, 1990: 411-412.
12- Ameli, 1981: 12-13.
13- Ibn Abi Osaybae, 1965: 16.
14- Demerdash, 1972: 267.
15- Elgood, 1973: 159.
16- Browne, 1985: 60.
17- Ibn Abi Osaybae, 1965: 60.

Al-Harrani.¹⁸ *Qefti* explained that *Astafan Al-Harrani* was a well-known physician, and *Ibn Bukhtishu* mentioned his name (though only his name was mentioned).¹⁹ Therefore one can assume that Greek Hippocratic medicine merged with the ancient Chaldean medical beliefs.

Elcoc stated that during the Abbasid period, Harranian Sabians provided Muslims with Greek medical knowledge more than any other nations and fostered a group of esteemed scientists in Baghdad, whose contributions were significant in three types of activities, namely translating and clarifying the Greek and Syriac scientific books, preserving the science of the Egyptians, Chaldeans, Phoenician, and Greeks, and providing compilations in various scientific fields.²⁰

3- Transferring the medical school from Harran to Baghdad

Another factor contributing to the progress of Harranian Sabians in Islamic medicine was transfering the medicalphilosophical school of Antioch to this city during the time of *Al-Mutawakkil* of Abbasid²¹, which in turn conveyed Egyptian-Greek medical traditions of Alexandria to Harran. The Harranian medical traditions were then crystallized in a more scientific context. With the arrival of Sabian physicians from the Qurra and Zahrun families to Baghdad, the so-called traditions were also transferred to this city.

4- Abbasid caliphs' coercion of Harranians towards medicine

Due to the occasional commands of Abbasid caliphs to avoid hiring dhimmis in government jobs, Harranians were compelled towards medicine. *Yaqut al-Hamawi* in his *Mu'jam al-Udabā* referred to *Abu-Ishaq Saabi* on this.²² Adam Mets quoted, "In 296 AH, Christians began to prosper in Baghdad and impinged on the authors in the government system so that *al-Muqtadir*, then caliph of Baghdad, was compelled to the revive the directive of *Al-Mutawakkil*. According to this directive that was issued in 235 AH, the government did not want any help from dhimmis that would reinforce their dominance on Muslims. Hence, he ordered that dhimmis would not be hired except for medicine or currency exchange."²³ The scientists of Harranian Sabians, therefore, turned to medicine, where they gained expertise so that medicine became their hereditary occupation.

Harranian Sabians Impact on Islamic medicine in Baghdad and other regions

One of the reasons of the rise of intellectual and philosophi-

18- Ibn Abi Osaybae, 1965: 150.
 19- Qefti, 1968: 102.
 20- Elcoc, 1963: 366-367.
 21- Masoudi, 1986: 112.
 22- Hamavi, 1993, Vol. 1: 142-143.
 23- Metz, 1964: 80.

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cal movements, as that of Harranian Sabians, was that, as the inheritors of ancient Greek science, Sabians were always compelled to compete with different groups in order to achieve superior positions and to gain attention in the international platform of Baghdad so that they excelled in various scientific fields including medicine. In other words, Harranian Sabians, as a religious minority in the Muslim state of Baghdad, had to endeavor to improve their financial state and obtain better ranks by every means possible. On the other hand, Abbasid caliphs and emirs were in need of the experienced and proficient physicians, especially ones from dhimmis. Such mutual need resulted in the progress of Sabians in Islamic medicine. They were able to greatly influence the medical science in Baghdad, the capital of Islamic caliphate and the other Islamic lands through various approaches.

1- Establishment of hospitals and health centers

In the early decades of the fourth century AH, Sabian physicians contributed greatly to the establishment of several hospitals. In this regard, *Sinan ibn Thabit*²⁴ is an outstanding figure. He was a sage consultant in applied politics and functioned better in organizing medical issues than treating diseases²⁵. Sinan had the largest contribution to the establishment of hospitals and public health centers in Baghdad and other cities, prevention of diseases, and regular visit arrangements to patients in cities and rural areas alike. His gaining the support of important figures, such as *Ali ibn Isa Al-Jarrah*, the vizier of *Al-Muqtadir*, helped him greatly in his performing the medical activities. Sinan and the vizier were able to elevate the public health to a level that had never been achieved before.

The hospital of Baghdad, in terms of facilities, did not satisfy the needs of patients, especially at the time of the outbreak of contagious diseases. Meanwhile, cholera plague started to spread in Baghdad. Sinan reminded the vizier of the necessity of building a hospital to fight against the outbreak. *Ali ibn Isa* constructed a hospital on the western side of the city, where the crowd of passersby and commuting people increased the probability of an outbreak, at his own expense and in a short time^{26, 27} In addition, in 306 AH, with the guidance and consultancy of Sinan, two hospitals, named Muqtadiri and Seyyedeh after *Al-Muqtadir* (caliph) and his mother, were built in Baghdad.²⁸

Sinan had also a great role in starting mobile hospitals and clinics at this time. He persuaded Ali ibn Isa to appoint experienced physicians and nurses taking herbs and food to different sites such as prisons, villages, and remote areas in 24- Sinan ibn Thabit ibn Qurra, the son of Abu Saeed (268-331 H) was a mathematician, scholar, historian, astronomist, and also proficient at medicine (Andolusi, 1997: 194; Hamavi, 1993, Vol 3: 1405). Similar to his father, he was profoundly skilled in the medical field and was one of the most eminent physicians of his time. His novel activities, as described by many, indicate his expertise in medicine (Ibn Abi Osaybae, 1965: 302-304; Qefti, 1968: 265-269). His most pronounced merit over the other physicians of Islamic civilization was his knowledge about technical and administrative issues of hospitals and his indefatigable attempts to improve the state and well-being of patients. 25- Elgood, 1973: 193. 26- Ahmad, 1989: 171.

27- Qefti, 1968: 269-270. 28- Oefti, 1968: 271. order to provide free medical services for patients in need. In line with this program, Sinan regularly traveled together with his trusted physicians to underprivileged areas such as Sawad²⁹ and tried to treat patients with contagious and epidemic diseases. His activities were not limited to Muslims. Although prioritizing Muslims, he treated dhimmis, too as he, for example, served the people of a mainly Jew-populated village, Sora.^{30, 31} It is also stated that Bajkam, whose mental illness was treated by Sinan, established a hospital on the west of Baghdad under Sinan's influence in 329 AH. This hospital was later reconstructed by *Adud al-Dawla* and became known as Adudi.³²

Sinan assigned a fixed share of the revenues to hospitals in order to facilitate their administration.³³ However, in cases such as Muqtadiri Hospital, the caliph himself used to pay the expenses of the hospital, 200 dinars per month, from his own assets.³⁴ It is also likely that the establishment of these hospitals during four years was associated with the prevalence of infectious and sanguine diseases; they were made to compensate for the scarcity of hospitals in the third century AH.

2- Hospital Management

Harranian Sabian physicians were not only involved in the construction of the hospitals, but also managed them in some ways. In the early days of Muharram of 306 AH, when the Seyyedeh hospital was launched in Baghdad, Sinan ibn Thabit was appointed as the chairman and assigned a physician to each ward of the hospital based on their expertise. Sinan also supervised the health and treatment issues of numerous cities, such as Mecca, Medina, and Terasus.³⁵ He was later appointed to manage all of the hospitals and health centers of Baghdad.³⁶

*Thabit ibn Sinan*³⁷, similar to his father, demonstrated his enthusiasm to work in hospitals and participated in public health care activities and was appointed by *Khaqani*, the vizier of the caliph, to the management of the newly-established hospital constructed by *Ibn Furat* in the center of the city.³⁸ Thabit was the director of Baghdad Hospital at the time of caliph *al-Muti Allah* (died in 363 AH) and *Emir Mu'izz al-Dawla* (died in 355 AH) and a figure of eminence in Buyid dynasty.³⁹ *Abul Hassan ibn Sinan*⁴⁰ was the director of the Baghdad hospital and the head of physicians in his time.⁴¹

3- Physician appraisals

Albeit the attentiveness adopted in training physicians, charlatans abounded in the form of physicians due to the flex-

29- Sawad was the name used in Islamic times for the villages and palm groves of the Southern Iraq (Dehkhoda, 1994, Vol 8: 1218), It means "black land" and refers to the stark contrast between the alluvial plain of Mesopotamia and the Arabian desert (Moein, 1977, Vol 5: 815).

30- Ibn Abi Osaybae, 1965: 301.

- 31- Qefti, 1968: 271.
- 32- Qefti, 1968: 268.
- 33- Adavi, 2002: 268.
- 34- Qefti, 1968: 271.35- Elgood, 1973: 194.
- 36- Ibid.

37- Thabit ibn Sinan ibn Thabit ibn Qurra Saabi Haarani (297-365 AH), who, like his grandfather, Thabit ibn Qurra, had a profound knowledge of medicine, philosophy, geometry and all of the old techniques of mathematics. He was a great physician, historian, and scholar that had read Hippocrates and Galen's books in medicine, and probed into them deeply (Ibn Emad Hanbali, 1984, Vol

3: 368; Vol 4: 334).
 38- Ibn Abi Osaybae, 1965: 305.
 39- Ibn Ebri, 1998: 238.

40- Abul Hassan ibn Sinan ibn Qurra

was a renowned physician. His birth and death dates are not known, yet considering the fact that he treated his brother, Abolfazl ibn Sinan, in 439 AH, he is assumed to live in the fifth century AH (Qefti, 1968: 536-535).

41- Qefti, 1968: 535.



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ible training techniques and lack of regulative organizations. The critical concept of appraising physicians has always gained attention as Galen wrote a book named Fi Mehnate Afzal- el-Atebba on it. In addition, various Islamic physicians wrote books on it such as Fi Mehnat-el-Tabib, written by *al-Razi* which is most akin to that of Galen.⁴² Assigning precise appraisals imposed upon the physician-to-be individuals or those practicing medicine for a while was difficult. These appraisals did not follow any particular order or consistency.⁴³ Al-Razi adopted a sensible approach in testing physicians. According to him, a trainee must be questioned about both theoretical and practical knowledge. If he fails to answer properly to the former, asking about the latter seems futile. Furthermore, the trainee must know about astronomical science, anatomy, living autopsy, and pharmacy. Al-Razi criticized several preposterous and non-effective questions that even some of the assessors could not answer. He believed that properly designed questions could unravel the talent of the trainee in the analysis and diagnosis. He should also be questioned about the diseases that have similar symptoms and are likely to be confused physicians. Eventually, the trainee must be familiar with humors, different temperaments, physiology, and nutrition as well as techniques to cure diseases without needing surgeries.44

This is also mentioned in books on hisbah. Shizari entitled the 37th chapter of his book as *Al-Hisbah*, *Fi- el- Hisbahal-Atebba- val- kehalin- val- Mojberin- val- Jarrahin*, where he listed the requirements of physicians, ophthalmologists, bone-setters, and surgeons. He stated that "Physicians are to be appraised according to Mehnat-el- Tabib of Hunayn, ophthalmologists to ten essays of Hunayn, bone-setters to Konash of Paul of Aegina, and surgeons to Gatajans of Galen."⁴⁵ He then proceeded to enumerate the requirements. Most of the physicians were general doctors, and their expertise fields were restricted to ophthalmology, surgery and occasionally, bone-setting.⁴⁶

Physician evaluation was brought up when a patient passed away due to malpractice.⁴⁷ The first person chosen to perform a task of this significance was *Sinan Ibn Thabit*. The physicians could only obtain a permit to practice medical activities if they were confirmed by Sinan. All of the physicians (approximately 860 individuals), except for the several eminent ones, had to follow this command.^{48, 49} The son of Sinan, Ibrahim, also became the chairman of the assessment committee of medical volunteers after his father's death at the time of caliph *Al-Mustakfi*. However, when Ibrahim⁵⁰ refused to disclose the issues related to the physicians after 42- Leyzer, 1986: 82,84

- 43- Leyzer, 1986: 83-84.
- 44- Leyzer, 1986: 85.
- 45- Shizari, n.d.: 80, 100-101.
- 46- Leyzer, 1986: 80.
- 47- Qefti, 1968: 265.
- 48- Ibn Abi Osaybae, 1965: 302. 49- Qefti, 1968: 265.

50- Ibrahim ibn Sinan (296-335 AH) was a very clever scholar, who had a profound knowledge of science, such as philosophy, medicine, geometry, astronomy and naturalism; but he was superior in geometry and medicine. Like his father, Sinan was a prominent and pioneering physician in his time (Ibn Emad Hanbali, 1984, Vol 3: 367; Ibn Kholacan, 1900: 314). their appraisals, the caliph had to replace Ibrahim with Abu Saeed Yamami, who was one of the greatest physicians of his time.51,52

4- Treatment of caliphs and important individuals of government

In the Abbasid caliphate, powerful individuals, such as caliphs, emirs, and viziers cherished physicians more than any other types of scientists as they would mostly keep physicians' company, which resulted in forming benevolent relations between them, despite their different religions. Therefore, scientists from other regions, such as Harran and Al-Jazeera gathered in Baghdad where they conducted their scientific works.53

Sabian physicians practiced Islamic medicine from the third to fifth century AH and took care of government individuals of significance, such as caliphs and emirs. From Qurra family, *Thabit ibn Qurra*⁵⁴ was the special physician of the caliph of his time, Al-Mu'tadid (died in 289 AH) while his son, Sinan perused treating caliphs of his time including Al-Muqtadir (died in 320 AH), Al-Qahir (died in 322 AH), and Al-Radi (died in 329 AH). Al-Oahir particularly trusted profoundly Sinan as he tried to make him convert to Islam. Sinan, however, fled to Khorasan and did not return Baghdad until Al-Qahir's death. 55, 56 In addition, after Al-Radi's death, Sinan became Bajkam's special physician and was able to cure his mental illness, so Bajkam put great effort in esteeming and cherishing him.^{57, 58} Thabit ibn Sinan had also the responsibility of treating Abbasid caliphs such as Al-Muttaqi, Al-Mustakfi, Al-Muti as well as Mu'izz al-Dawla of Buyid dynasty.^{59, 60} He also tended *Ibn Muqla*, the vizier of Al-Radi, whose hand was cut off under the order of the caliph and Ibn Ra'iq.61,62 The accounts of Ibn Muqla and the inhumane behavior he was subjected to as opposed to that Thabit are thought-provoking and meaningful as Thabit treated him with profound compassion and affection. However, Ibn Mugla passed away due to his severe wounds and injuries. Ibrahim ibn Sinan was at the service of Abbasid caliphs and lived with the utmost dignity and glory. He also treated Abul Hassan Sari ibn Ahmad ibn Sari Alkandi, a poet, who wrote poems in his admiration.63,64

From Zahrun family, Halal ibn Ibrahim ibn Zahrun, Abu Ishaq Saabi's father who was a renowned scribe, was Amir al-umara (chief emir) Tuzun's special physician, however, he did not pay much attention to his advice.⁶⁵ His brother, Thabit ibn Ibrahim ibn Zahrun also cured ibn Baqiyya, the vizier of Izz al-Dawla, who suffered from a partial stroke, 51- Elgood, 1973: 197. 52- Dehkhoda, 1994, Vol 1: 233. 53- Li, 1992: 128.

54- He was a translator, astronomer, mathematician, physician, and philosopher of the third century AH. Ibn Nadim confirms his parentage as follows: "Abol Hassan Thabit ibn Qurra ibn Marwan ibn Thabit bin Karaea ibn Ibrahim ibn Karaea ibn Marinus bin Solomos". He was born in 211 AH in Harran and died in 288 AH at the age of 77 (Ibn Nadim, 1987: 489). Zahbi states that "There was no other physician in his time as proficient as him" (Zahabi, 1991: 137). Ibn Jovzi described him as the leading figure in the progress of medical science (Ibn Jovzi, 1992, Vol 12: 418). He also reported on his expertise as it was mentioned that he was superior in his ability to diagnose patients. Qefti and Ibn Abi Osaybea have widely described his miraculous deeds in medicine (Ibn Abi Osaybae, 1965: 296-297; Qefti, 1968: 168-169).

55- Ibn Ebri, 1998: 226. 56- Hamavi, 1993, Vol 3: 1405. 57- Ibn Abi Osaybae, 1965: 302-304. 58- Qefti, 1968: 267-269. 59- Ibn Abi Osaybae, 1965: 304. 60- Qefti, 1968: 154. 61- Ibn Abi Osaybae, 1965: 305-306. 62- Ibn kholacan 1994: 115 63- Ibn kholacan, 1900: 314. 64- Ibn Emad Hanbali, 1984, Vol 3: 367 65- Qefti, 1968: 477.

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through cupping therapy.^{66, 67} *Thabit ibn Ibrahim*'s technique of diagnosis through checking patient's neck pulse was famous in his time as he was able to tell about the fruits *Abu Abd-Allah* (the poet) and *Abu'l-Abbas* (the astronomer) had eaten with their meals the previous night only through checking their neck pulses.^{68, 69} Apart from the physicians of Qurra and Zahrun families, the anonymous author of *Al-Ayoun* and *Al-Hada'q*, mentioned a Sabian physician named *Ahmad ibn Abul Hassn Saabi* who was appointed by *Al-Radi* to cure the eyes of the previous caliph, *Al-Qahir* who was blinded as a revenge.⁷⁰

In the outmost west of Islamic lands, Al-Andalus, there were two other Harranian physicians, named Ahmad and Omar, sons of Yunes Harrani, who served Al-Mustansir (died in 336 AH). While there were many other physicians working in Al-Andalus then, Al-Mustansir opted for these two brothers as the special physicians and placed them in Medina Azahara. One of the brothers, Omar, passed away due to gastritis while the other continued his service as the special physician of the caliph. Ahmed was a wise, serene and clever man, whose visit to Baghdad brought him expertise and experience in the treatment of patients. He, being the special physician of the caliph, was able to provide valuable services in the field of health and treatments for the Andalusian people. As an example, he established an outstanding pharmacy in the caliph's palace at his order and persuaded the caliph to give free medicine to the poor.⁷¹ Ahmad was close to the caliph to such an extent that the caliph, clad only in a cotton shirt, would sit before him in summers and allow Ahmad to watch his food. He could visit the caliph without any formalities and was so trusted that he was allowed to tend the ladies and girls of the royal harem.⁷²

5- Literary works of Harranian Sabian physicians

In the history of Islamic medicine, the members of some families chose medicine as their chief occupation for consecutive generations and through assiduity and attentiveness, they were able to contribute greatly to the enhancement of the moral, scientific, and literary status of the medical science.⁷³ Two of such families were Qurra and Zahrun families, both of Sabians. The following section will mention their literary works as well as those of their students.

5-1- Qurra family

Qurra family is the descendants of *Qurra ibn Marwan*. They mostly lived in the second Abbasid era (232-334 AH); applying the medical knowledge they inherited from their 66- Ibn Abi Osaybae, 1965: 308.
67- Qefti, 1968: 156-157.
68- Ibn Ebri, 1998: 243.
69- Qefti, 1968: 159-160.
70- Anonymous, 1973: 343.
71- Ibn Joljol, 1955: 113.
72- Ibid.

73- Khalaf Hamarne, 1984: 135.



fathers, they wrote various works and trained influential students in medical science.

5-1-1- Thabit ibn Qurra

One of the most well-known Harranian physicians who has written a lot in the medical field is *Thabit ibn Qurra*. The translation movement culminated in his lifetime, and his activities contributed to the further development of this movement as he was fluent in Greek, Syriac, and Arabic languages. He translated several essential medical books, mostly of Galen, from Greek and Syriac languages to Arabic and proceeded with explaining, critically revising, and summarizing them.⁷⁴ He used the most effective treatments for the diseases that were difficult to cure; yet, the details of these prescriptions remain unknown.

His most famous medical work was *Al-Zakhirat fel-Teb*, which was organized in 31 chapters.⁷⁵ The book includes a summary of his entire medical acts in a single volume. This book is extremely valuable with regard to analyzing the medical annals, and according to Nezami, it was one of the five books taught in the second year studying at the medical faculty.⁷⁶ Elgood found the book astonishing and an indicative of Thabit's unique expertise in medicine.⁷⁷ *Ibn Abi Osaybae* quoted a part of *Al-Zakhirat*, "Nothing is more harmful to the elderly than a good cook and a beautiful bondwoman for the former encourages excessive eating that results in diseases, and the latter drives him towards self-gratification that brings old age, so be aware that a healthy body comes with light eating, a peaceful soul with avoiding sins, a serene heart with thinking less, and an untroubled tongue with speaking less."⁷⁸

There were different methods of education in the field of medical science. The first method was that through generations of a family, the sons and occasionally daughters would learn about this occupation from their fathers, e.g. the families of Jurjis ibn Jibrail ibn Bukhtishu and Hunayn ibn Ishaq. The second method is self-teaching; i.e. the student would read medical texts until he regarded himself proficient in the field, such as Ibn Sina and Ali ibn Ridwan. The third method was that the students would loudly read the books of important authors, such as Hippocrates and Galen before their masters as he would listen to them. The problem with this method was that the students could not comprehend the texts. The fourth method was the clinical one as the students would enter the medical world through the classes held in hospitals. Eventually, the last method was through medical schools as some physicians would utilize their houses as well as mosques for medical training.79,80

74- For the complete list of Thabits's medical works, visit Ibn Abi Osaybae, 1965: 298-300; Qefti, 1968: 162-168.

75- Elgood, 1973: 186.76- Nezami Aroozi, 1954: 110.77- Elgood, 1973: 186.

78- Ibn Abi Osaybae, 1965: 298

79- Leyzer, 1986: 62-63,66,69.

80- Mohaqeq, 1995: 311-312.

The major method applied by the Sabian physicians was the first one. In this respect, Sinan *ibn Thabit* gained medical knowledge through his father while Thabit wrote his most important literary work, *Al-Zakhirat*, for his son.⁸¹ *Abul Hassan Harrani* and *Ibn Osid Nosrani* were also the students of Thabit. *Ibn Nadim* stated that *Thabit* favored *Ibn Osid* over his fellows.⁸² Overall, one can consider Thabit as a great physician, prolific translator, and an active and effective scientist that insured a unique position for himself in Islamic civilization. He should be deemed as the founder of a novel movement in Islamic civilization.

5-1-2- Sinan ibn Thabit

Although *Sinan ibn Thabit* was an accomplished physician and looked after numerous caliphs in his lifetime, he was not particularly successful in writing medical books; however, he was more effective in training students.⁸³ Similar to his own education, Sinan, in turn, taught medicine to his son, Thabit. Among other famous students of Sinan, who benefited greatly from his knowledge, one can mention Abul Hassan (died in 387 AH), known among the physicians as Talmiz Sinan (student of Sinan). He was one of the renowned physicians in Baghdad, who achieved a high profile in medicine. In the days of Buyid dynasty, his expertise in Baghdad was unsurpassed, and he was famous for his keen perception.⁸⁴ *Abul Hassan ibn Kashkeraya* was another student of *Sinan*.⁸⁵

5-1-3- Thabit ibn Sinan

Although Sabit ibn Sinan did not write any medical books, he educated numerous students, such as Ahmad ibn Yunes and Omar, both sons of Yunes Harrani, who had migrated from Al-Andalus to Baghdad to be trained under Thabit's supervision. They read Hippocrates and Galen in the presence of Thabit ibn Sinan with uttermost respect and humbleness.^{86, 87} Ishaq ibn Shalite was another student of Thabit, who married his master's daughter and became the step-father of Abol Hassan Halal ibn Hassan Saabi, who was one of the most prominent scholars and historians of his time. He continued the book Thabit had previously started writing, yet he could not finish it.⁸⁸ It is likely that *Ibn Khomar Abol* Kheir ibn Savar ibn Baba ibn Bahram (Behnam) (died in 407 AH), a Christian physician, philosopher, and translator of Iranian descent was also Thabit's student. His master in medical science remains unmentioned, yet it is known that he had a friendly relation with Thabit, so it is safe to assume that Thabit was his master.89

81- Ibn Abi Osaybae, 1965: 299. According to Qefti, he has written Alhas ala ta'alom al- teb val-hekmat for his son, Sinan, not Al- Zakhirat (Qefti, 1968: 163).

82- Ibn Nadim, 1987: 490.

83- Mahmud Najmabadi considers Resalat fi moshel as one of the medical works of Sinan (Najmabadi, 1987: 286); however, it is highly unlikely as Ibn Osaybae and Hamavi has mentioned its name as Resalat fi Sahil. On the other hand, the book is about astronomy not medicine.
84- Qefti, 1968: 535.
85- Qefti, 1968: 207.

05 Qeni, 1700. 207.

86- Ibn joljol, 1955: 112. 87- Andolusi, 1997: 194.

88- Elgood, 1973: 197.

89- Sajadi, 1990: 463

5-1-4- Ibrahim ibn Sinan

Ibrahim ibn Sinan wrote two books in medicine: *Hefz al-Sehat* about the spread of cholera-related illnesses and a treatise on *Hobub Moshelat*⁹⁰. There is no reason to believe that he had any students or that his son, Isaac, was also a physician.⁹¹ With the death of Ibrahim, the medical genius of Qurra family also declined.

5-1-5- Abol Hassan ibn Sinan Saabi

Abol Hassan ibn Sinan was Thabit ibn Sinan's brother. He cured his brother, Abolfazl ibn Sinan, who was seriously sick due to the outbreak of cholera in 739 AH. He had previously treated Halal ibn Mohsen ibn Ibrahim Saabi, a renowned historian and consultant in Muharram of 436 AH⁹². As mentioned before, Abol Hassan became the director of Baghdad hospital and head of physicians in his time and obtained impressive achievements in medicine and treatment methods. The expertise he demonstrated in treating his brother and Halal ibn Mohsen indicated his status in medicine and revealed that he was as skilled as his antecedents and relatives. Nevertheless, despite his proficiency, his behavior was fueled with malice and hostility as he often misbehaved his brother and fellow physicians⁹³. His son, Abol Faraj as well as his grandson, Abol Hassan ibn Abol Faraj were also prominent physicians in his time. Abol Faraj was famed for his unparalleled and accurate diagnoses among the public while Abol Hassan, if not better, was not less skilled than his antecedents as he was a famous, leading figure in medicine and extremely intelligent and good at diagnoses94.

5-2- Zahrun family

While Qurra family dominated in Islamic medicine in the second part of Abbasid caliphate (232- 334 AH) era, Zahrun family, whose descendant is attributed to *Ibrahim ibn Zahrun Harrani*, took their place in the third Abbasid caliphate (334- 447 AH) period. They were not engaged in politics.⁹⁵ Qurra family excelled in various fields such as mathematics, philosophy, physics, and medicine; the first generation of Zahrun family, however, were compelled to concentrate exclusively on medicine due to the abovementioned command of *Al-Muqtadir* about avoiding hiring dhimmis for the government jobs. The second generation of this family from Abu Sahag Sabbi were simultaneous with the ruling of Buyid dynasty in Baghdad, They turned to literary and historical sciences. The first-generation of physicians of Zahra's family are as follows.

90- Dehkhoda, 1994: Vol. 1: 233.
91- Elgood, 1973: 197.
92- Qefti, 1968: 535-536.
93- Qefti, 1968: 536.
94- Qefti, 1968: 534-535, 574.
95- Adavi, 2002: 183.

5-2-1- Ibrahim ibn Zahrun Harrani

His nickname was *Abo Ishagh*, and he was *Ibrahim ibn Hellal*'s grandfather, the owner of famous epistles at the time of *Al* of Buyid. Undoubtedly, he had some students and remarkable works. *Ibn Abi Osaybae* once made a comment on him as, "He is famous in medicine and known for good behavior, and he has plenty of information and a brilliant practical book in medical science".⁹⁶ *Qefti* also mentioned *Ibrahim ibn Zahrun* as a Harrani Physician. *Thabit ibn Sinan*, in his history book stated that on a Thursday night, the nineteenth day of Safar of the year 309 AH, Abo *Ishagh Ibrahim ibn Zahrun Harrani* was found dead.⁹⁷

5-2-2- Hellal ibn Ibrahim ibn Zahrun

His nickname was *Abol Hossain Sabi Harrani*, and he was also a physician. From the date of his birth to death, nothing had been reported about him. He lived in Baghdad and was a good and wise physician who treated the people well. Among all his elder companions inBaghdad, he was the pioneer. In medical history books, apparently he did not have any students and works because there are no references to it. As previously mentioned, he was the specialist physician of *Amir al-umara Tuzun*. Although Tuzun had a good relationship with Hellal, because he was not smart, he did not follow his orders as it should or should have been.⁹⁸

5-2-3- Abol Hassan Thabit ibn Ibrahim⁹⁹

Several works, both translated and original, remain from Thabit ibn Ibrahim. He translated a section of Al-ghuba¹⁰⁰ (Impetigo) as well as a book of Philigarius, an old physician, about the diseases of teeth and gum to Arabic.¹⁰¹ He also wrote two books. One of them was a collection of his answers to others' medical questions. The other one was named Eslah Maghalat men Konnash Yohanna ibn Sorabiyun,^{102,103} yet it is not clear which Konnash Yohanna ibn Sorabiyun he revised.¹⁰⁴ Ibn Ibrahim also educated students such as Ibn Botlan, who was a Christian physician and logician in the last decades of the fifth century AH and had a deep understanding of the science before Islam. He obtained his education from Narasay Karkh and read most of the books about wisdom (hikmah) in the presence of Abol Faraj; however, he learned about medicine from Abol Hassan Thabit ibn Ibrahim.¹⁰⁵

5-3- Other Sabian physicians

Apart from the two families of Qurra and Zahrun, there were other prominent physicians among Harranian Sabians

96- Ibn Abi Osaybae, 1965: 307.97- Qefti, 1968: 109.

98- Ibn Ebri, 1998: 234.

99- Thabit ibn Ibrahim ibn Zahrun is one of the contemporaries of Emir Izz al-Dawla Bakhtiyar (367-356 AH). His kunya is Abol Hassan, and he is the uncle of Abu Ishaq ibn Ibrahim bin Halal Saani and is also known for his treatises (Oefti, 1968: 156). Qefti stated that although he was a great and skilled physician in Baghdad, he did not unravel his medical secrets (Qefti, 1968: 156). 100- Impetigo is a disease that causes the skin to peel and is cured with applying saliva on it (Dehkhoda, 1994, Vol 11: 15685). 101- Ibn Nadim, 1987: 535. 102- Ibn Nadim, 1987: 490. 103- Qefti, 1968: 156. 104- Keramati, 2001: 77.

105- Ibn Abi Osaybae, 1965: 325.

who are referred to below:

5-3-1- Yunes Harrani

Yunis Harrani, according to *Ibn Joljol*, was from Harran and later settled in *Al-Andalus* during the days of *Emir Mohammad Umayyah*.¹⁰⁶ There is no mention of any works written by him, but he trained students who, under his guidance, managed to make a special potion called the great moghayes, which *Younis* took with himself from Harran to *Al-Andalus* and sold each cup of it to fifty dinars.^{107, 108} The dates of birth and death of *Yunes Al-Harrani* is unknown. Considering the fact that his children, Omar and *Ahmad* were practicing medicine in the fourth century AH in *Al-Andalus, Yunes Harrani* must have had died in the fourth century. We have mentioned the sons of Yunes Harrani before.

5-3-2- Ahmad ibn Vasif Al-Saabi

Ahmad ibn Vasif Al-Saabi was one of the physician of Baghdad in the first half of the fourth century AH. He stood out in treating eye-related diseases. He was second in medicine in his time so that the people from different regions came to him for education and treatment. As mentioned previously, *Ahmad* and Omar, the sons of Yunes Harrani, gained their knowledge about eye-related diseases from him.^{109, 110} It is mentioned that a man from Khorasan traveled to Baghdad to visit *Ibn Vasif* to have his cataract treated.^{111, 112}

5-3-3- Harun ibn Sae'd ibn Harun Saabi (died in 444 AH)

Shortly referred to as Abol Nasr, he was one of the Sabians of Baghdad who had unique mastery in medicine and was renowned for his qualifications and purity. He was the head of physicians at the time and also the head of the Baghdad's Adudi Hospital. He passed away on Thursday, the third of Ramadan in 444 AH in Harran.¹¹³

Conclusion

In light of what has been discussed, given the significance of medicine in Islam and the fact that Islamic societies are devoid of racial and ethnic prejudices, different religions and intellectual movements such as Sabians, could enter Islamic medical field. The rise of Harranian Sabians in Islamic medicine was due to various factors such as the Chaldean medical traditions, Greek medical culture and science. One can assume that with the presence of Harranian Sabians in medical science of Islamic civilization, this field was of Greek origins. Other related factors were transference of the medical 106- Ibn joljol, 1955: 94.
107- Ibn joljol, 1955: 94-95.
108- Qefti, 1968: 159-160.
109- Ibn joljol, 1955: 112.
110- Qefti, 1968: 585.
111- Ibn Abi Osaybae, 1965: 311.
112- Ibn joljol, 1955: 81.
113- Qefti, 1930: 461.

school from Harran to Baghdad, and coercion from Abbasid caliphs leading Harranians towards medicine. Harranian physicians, who were mostly from two Qurra and Zahrun families, supervised health care and treatment services directly and indirectly in Baghdad and various regions. They contributed greatly to the growing Islamic medical science from the third to the fifth century AH through various means such as contributions in health and treatment plans such as establishing, managing, and administrating hospitals, making pharmacies for the poor and in need, having appraisals for physicians, treating caliphs and eminent government figures, writing books and translating Greek-Syriac books to Arabic, and educating prominent students.

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Res Hist Med 2019; 8(2)