

TRADITIONAL AND INTEGRATIVE MEDICINE



Trad Integr Med, Volume 6, Issue 3, Summer 2021

Historical Article

Scientific Life of Hakim Mohammed Azam Khan Rampuri Chashti; Custodian of Indo-Iranian Medicine during the 19th Century Changes of Indian Subcontinent

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Received: 1 Feb 2021 Revised: 22 Apr 2021 Accepted: 3 May 2021

Abstract

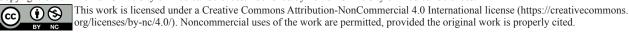
Indo-Iranian medicine dates back to a couple of centuries ago. The Gurkanies' movement from Iran and Transoxiana to India introduced the Persian language to India, and the scientific language changed from Arabic and Sanskrit to this language. Iranian medicine has had a remarkable influence on the Indian Subcontinent, a sign of which is the elevated medical literature written in this language. Hakim Mohammad Azam Khan was born in 1813 AD. His ancestors were great sages of Khorasan (in north east of Iran) and then migrated to Afghanistan and India. Since he lived in the late 19th AD century, he had access to many Iranian traditional books. He provided rich sources of traditional medicine for the next generation by publishing traditional medicine books and traditional pharmacology. He wrote great books such as the *Exir Azam* (a comprehensive medical encyclopedia), *Romouz Azam* (a general book on medicine), *Qarabadin Azam* (Pharmacopeia). With his profound 19th century orientalist approach that emphasized safeguarding the Persian language, he created numerous works in the field of medicine, making him the most serious custodian of Indo-Iranian medicine in India. The present study reviews the scientific life of a contemporary famous author of Indo-Iranian medical literature written in Persian Language.

Keywords: Mohammad Azam Khan; Physicians; Persian medicine; Traditional medicine; Complementary medicine

Citation: Afsharipur H, Pakbaz S, Shahriari M, Golshani SA, Salehi A. Scientific Life of Hakim Mohammed Azam Khan Rampuri Chashti; Custodian of Indo-Iranian Medicine during the 19th Century Changes of Indian Subcontinent. Trad Integr Med 2021; 6(3): 288-297.

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Introduction

Language and culture are closely related to each other. Cultural patterns, mores, traditions, and ideologies that consist of cultural components are reflected in language. A language conveys the culture and society of those who speak it. Therefore, it can be said certainly that social evolution, political changes, and development of the educational system can take place only by means of language and culture [1].

Western science was promoted in India by medical science. The first Indian faculty of medicine was established in Calcutta, and specific attention was paid to teaching scientific lessons at the faculties [2]. In spite of the fact that British government had adopted a tolerant policy on the local Indian languages, their main objective was to promote the English language. The decisive role of the Persian language in politics and wars made the East India Company officials curious about the history of Islam and key factors of efficiency of Muslims' taxation and administration systems [3]. East India Company was the foundation of British Empire in India and even further lands [4]. The Persian language could give them a better understanding of the distinct differences of protocols, ethical rules, mores, and traditions of Mughal Empire, and plays a key role in understanding the regional history of Mughals and documents remaining from their era. Therefore, the English newcomers had to learn the Persian language in order to rule India. The Persian language was utilized first in the economy [3]. Charles Grant, who was a member of the commercial board of directors in 1787, believed firmly in the necessity of promoting

and teaching the English language, considering the historical relationship between Indians and Europeans in Bengal. He insisted on replacing the Persian language with English, as the official language, in order to encourage Indians to learn this language. His idea was realized a couple of decades later [2].

The enactment dated 7th of March, 1853, stressed that "the main goal of the British government should be promoting European knowledge and literature. The existing resources are allocated to introducing the local population to the English literature and science by means of the English language". Since then, the English language replaced Persian (Mughals' official language) and became the Indian government's official language [2]. The UK has been able to impose its culture on a number of nations across the world due to promotion of the English language and literature [1].

The English language became the only common language of diverse Indian races, which was spoken in all political congresses attended by representatives of the people from all over the country. Meanwhile, lots of Indians with European education took important positions in administration [3]. Of course, it must be admitted that English as the common language brought diverse Indian races close to each other and helped them establish stronger ties; and this was something that the Persian language never managed to do [5]. On the other hand, due to the promotion of the English language, Indians were separated from their cultural background and historical identity, and the new generations, especially the Muslims, cannot benefit easily from the rich Persian and Arabic resources, and this vast ocean of knowledge is abandoned. Instead, Indian researchers can easily benefit from the West's latest industrial achievements and are not in need of translation movements as the other Third World countries, especially the Islamic countries do. They can use all books published in the west directly, and this has helped them grow rapidly in the field of industries and technology [6].

Scientists like Hakim Azam Khan Rampuri who researched, taught, and practiced the medical sciences in the Persian language did not accept the change of the language and retaliated in this regard. As an orientalist, he played a significant role in promotion of the Persian language by writing books in the field of medicine. In the present article, we aim to introduce him and review and criticize his works.

Method

This article used search engines and the data-base such as pubmed, Google scholar, Scopus, Web of Science, SID, Iran Medex and Iran doc. Related articles were collected and reviewed with keywords including Traditional Medicine, Hakim Mohammad Azam Khan, *Exir Azam*, Naiier Azam, and Nazem Jahan. We also carried out research in non-English sources in Ibn Sina Library of Traditional Medicine in Shiraz University of Medical Sciences, National Library, and the Fars Documentation Center and Noor digital library.

Biography

Birth – death

Mohammad Azam Khan was born in Rampur (Mustafa Abad) in the first half of the 13th century AH (19th AD century) [7]. There are disagreements about the years of his life. The author of the books: Nashat al-Khawatr, Bahj al-Mussama and al-Nawazar (death. 1922 AD) cited the birth of Hakim Mohammad Azam Khan in 1813 AD. His death was quoted by his nephew Hakim Najm al-Ghani ((death. 1932) AD), the author of Khazain al- adwiyah [8] and Qarabadin Najm al-Ghani[9]) on Monday, April 1902 AD. In this case, he lived for 90 years.[8] Some have also quoted his life for about 130 years. It is mentioned in the introduction part of the Naiier Azam book that Mohammad Azam Khan was 23 years old when he arrived in Bhopal¹ from Rampur in 1834 AD, and died on November 15, 1882 AD. In this case, he lived for 73 years [10]. Hakim Nayer Wasiti mentioned the date of his death on April 13, 1901 [11]. (Figure 1)

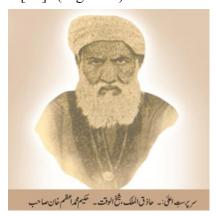


Figure 1. Portrait of Hakim Mohammed Azam Khan Rampuri Chashti²

^{1.} It is the capital of Madhya Pradesh of India. This city is located on the edge of two beautiful lakes, famous for the beautiful natural scenery around them in India.

 $^{2. \, (}http://desiakhbar.com/demos/tayyebi/site/images/hakim_m_khan.png) \\$

Hometown, ancestors, and children

The main hometown of Hakim Mohammad Azam Khan was Sistan Khorasan His ancestor, Hakim Mohammad Kazem Khan, had immigrated from Khorasan to Kabul. His child, Hakim Mohammad Ismail Khan, was special physician of Ahmad Shah Abdali due to his reputation. He lived there until the end of his life and died in Kabul. His other son, Razi Khan, was very brave and had special position in the Abdali army. Due to his great courage, Navab Faizullah Khan, the governor of Rampur, with the permission of Ahmad Shah Abdali, kept him at Rampur. The son of Razi Khan, Hakim Shah Azam Khan, was a famous sage in Rampur and they called him "Haznas al-Hakma". Hakim Mohammad Azam Khan, known as the world's Nazem, is the son of this great king Azam Khan [10]. His son was Mohammad Afzal and his grandson was Akmal Khan; both were physicians [7].

After completing his studies in 1835 AD, he traveled to Bhopal and was named as special physician for Navab Nazir al-Dawlah Jahangir Mohammad Khan, the husband of Sekandar Beygum (death. 1865 AD), known as the Dullha, the head of Bhopal [8]. After that, he worked for Nawab Sekandar Beygum. In 1848 AD, he traveled to Lucknow 1 where he became familiar with the British representative, William Henry Sulliman, but he had to leave Lucknow due to the turbulent circumstances [7]. Then, he went to Ajin and spent three years there in attendance of Bijabae. Eventually, he traveled to Indore, where he performed significant ser-

vices and spent the rest of his life working for the governor of that region (Tukoji Rao Holker IInd), and he lived there until the end of his life [8].

He tended to Sufism and mysticism in the 1863-1873 AD and tendered allegiance to Mohammad Amir Shah (death. 1873 AD) from Cheshtiyah Rampur [7].

Professors and students

He was interested in the science of medicine after receiving basic education (mere, syntax, logic, and Persian) with the famous scholars of the time, such as Molavi Abdul Rahim ibn Mohammad Sa'id and Mufti Sharaf al-Din Rampori and other scholars. He first learned medicine from his father [8].

Hakim Nour al-Islam and his uncle Hakim Asadālī who were disciples of Mohammad Hashem Shirazi, known as Alawi Khan, the most famous person after Mohammad Hussein Aghili in the family of Aghili, were his medical teacher [12]. It seems that he is also related to the school of medicine in Shiraz due to this fact [11]. In the preamble of *Mohit Azam*, he introduced himself as disciple of Hakim Nour al-Islam and Hakim Nour al-aslam as a disciple of Hakim Asadālī [13]. In the compilation of his books, he used the works of Alawi Khan and his disciples, such as Hakim Noorullah, the author of Anvar al-Alaj and Hakim Sana'ullah, the author of Sana'I teb (the teacher of his father, Shah Azam Khan) [12]. Hakim Azam Khan completed his medicine education at the age of 22, and from then until the end of his life, he continued this field [10,14].

^{1.} It is the capital of Uttar Pradesh in India.

His son Mohammad Afzal Khan, and Hakim Sayed Abd al-Islam who was the master of Quran [15] as well as his nephew Hakim Najm al-Ghani and Hakim Mohammad Yusuf Ali Khan [13] were his famous disciples.

Works

An outcome of British policies in India and establishment of East India Company was replacing the local language with English and changing the official language of Indian Subcontinent from Persian to English. This made Hakim Mohammed Azam Khan increase the use of the Persian language in writing his medical books in order to defeat this policy. Azam Khan, this hardworking Persian author, spared his entire fruitful life to utilize the earlier works to create rich and everlasting works of medicine that make a brilliant episode of the history of Islamic medicine in India [16]. Hakim Azam Khan, known as Nazim Jahan, was an eminent figure of Indian medicine school after Hakim Shah Arzani Shirazi. He followed his masters, who were followers of Shiraz, Gilan, and Hamadan schools of medicine in India, and chose to write all his abundant and valuable works in Persian [7].

He adjusted his medicine works in a way that the works are totally precious and rare. His office was so famous, and many patients referred to his office. In most cases, there were a lot of patients gathered there. Nevertheless, he had a lot of compilations besides his works. It is said that he spent 18 years for compilation of *Exir Azam* and eighteen years for *Mohit Azam* [11]. His works are listed in Table 1.

Some of his books include The List of Printed and Medical Manuscripts Books in Hyderabad (Deccan) Library, compiled by Hakim Abdul Wahab Zohory and The List of Medical Books Compiled and Translated To Arabic, Farsi And Urdu In The Subcontinent of Pakistan And India Recent Century which is now accessible at the Library of the College of Medicine (the medical school of Avicenna) of Lahore [11].

Amongst his significant works we may refer to:

Exir Azam

Exir Azam is the great masterpiece of Mohammad Azam Khan. He wrote this book for his son Mohammad Afzal Khan and his disciple Seyed Abdul Salam in four volumes [15]. According to the author, it is the fifth book of Mohammad Azam Khan which was written due to the lack of a comprehensive book on all diseases, their causes, and treatments.

According to him, access to the useful books was too hard. In addition, prolonged contents, Arabic terms, and their perceptual meaning were not possible for people. Therefore, excellence and simple and reprehensible phrases were used. The book was named due to its profitability, usefulness and the authors' names remain in historical memory [14,15].

The value of the book is due to the translation of Arabic texts and quotations from Persian texts; more than one hundred and fifty sources are mentioned in the introduction part. More importantly, some manuscripts mentioned in this book do not currently exist due to missing over time or not being identified by the librarians. He is kept alive the names of their original authors

and some of their works for the future of Iranian medicine [14,15].

The order of writing the *Exir Azam* is as follows:

- The first volume includes the first chapter which is the introduction part. First, the general causes of each organ's disease, the diagnosis and treatment, and its types are explained. Then, all the diseases of each organ, with the causes, signs and ways of diagnosis are completely explained to be accessed easily by physicians. In this volume, the diseases of the head, eyes, ears, etc. have been mentioned after the introduction in the next five chapters.
- The second volume in ten chapters deals with the lip, facial, lung, heart and stomach diseases.
- The third volume in nine chapters deals with the liver, gallbladder and spleen, bladder, reproductive organs of men and uterus diseases.
- The fourth volume in nine chapters deals with the diseases of the back, hands and feet, fever, swelling, skin diseases, hair, nails, toxins, and bites disease [10,14,15]. At the end, there are two chapters with the title of termination. The first chapter describes the weight used in the book in alphabetical order, and the second chapter describes drug combinations, along with the name of the disease in alphabetical order [10,15].

Exir Azam is the last major compilation of traditional medicine in Farsi, which was written according to the most ancient medicine sources of disease treatment and food diets [17]. It is used as one of the main sources of researchers in studies and research which has been done on diseases in traditional medicine [18-20].

Romouz Azam

Romouz Azam was written in 1847 AD by the command of Nawab al-Dawlah Jahangir Mohammad Khan. It has one introduction, twenty-four articles, and one final part. Explaining the illnesses of each organ and teaching the prescription writing are its characteristics [17]. The author listed the illnesses of each organ completely in one article. He mentioned general information at the beginning of each article, and then he described the diseases of an organ and explained the illness. In introduction, he mentioned the name of his teachers and quoted some stories of them about "teaching the prescription writing" [7].

Romouz Azam is compiled in two volumes; the first volume includes the introduction and the first to twelfth papers, and the second volume consists of the thirteenth to the end of the paper [7,10]. A closer look at this book reveals that the author accessed many Iranian medical sources and used them in the compilation of his book. In the introduction section, in addition to referring to the used resources, personal experiences and the notes from his father, he mentioned works of his predecessors, which clearly shows that this book is a mixture of Iranian medical and Indian medicine [21]. In this book, personal morality that shows his philosophical and religious beliefs is considered. Also, the behavior of the physician in the social dimension and relationship with the patient reflects the legality and social aspect of moral law [21].

Qarabadin Azam

Mohammad Azam Khan started writing Qa-

rabadin Azam in 1891 AD, in which he introduced his own and teachers' prescription in alphabetical order in the form of *Qarabadin*. Hakim Mohammad Akmal Khan, the grandson (or great-grandson [13]) of Mohammad Azam Khan, added some parts to this article and published it along with an attachment titled *Qarabadin Azam and Akmal* in Delhi in 1898 AD [7].

The *Qarabadin Azam* is relatively comprehensive and brief, compared to other books. The advantage of this book is providing a list of diseases in 38 pages at the end of the book. Thus, the user can easily find different forms of medicine for each illness [7, 17]. This book is related to the tradition of collecting instructions from the "golden age" of Islamic medicine [16].

Naire Azam

This book which consists of one introduction, two teachings chapters and one termination includes important issues in recognition of pulse and its types. Despite its difficult prose, it is so effective in obtaining information about the pulse. The introduction chapter expresses some beneficial effects of pulse. The first chapter shows the ten types of pulses and their causes. The second chapter shows the types of combined pulses and the final chapter includes various types of composites and combined pulses. He used several important sources in his writing.

The important point of this book is the way of starting and ending the discussion. He ignored the long and detailed discussions and arranged the presentation of the topics in this book. The value of this book is in materials that are not

mentioned in other medical books or they are not in detail, especially in expressing unspecified material types like analyzing the types of pulse. This book is one of the ancient few books about pulse in Farsi.

The advantage of this book is its briefness because it does not have brevity of The Canon of Medicine which is difficult to use and not the prolixity of Tohfa Sadie that requires patience. However, it should be mentioned that the study of this book is not enough and needs the study of other books related to pulse. It is necessary to refer to these pulse books [10].

Mohit Azam

Mohit Azam, in four volumes, was written about the properties of drugs (along with the Greek, Indian and English drugs) in 1879 AD [10]. It took eighteen years to be compile this book [11] He used 68 major medical resources along with sub-resources and his experience [13]. The purpose of writing this book, as he stated in the preamble, is to refrain from addressing previous books on some Greek drugs and the names and effects of most Indian drugs.

The approach in this book is in a way that after mentioning the reason for writing and explaining in the preface, the introduction part refers to the general medical rules in the use of drugs. Then, drugs are described in alphabetical order in 29 characters [13].

Rokn Azam

Rokn Azam is written on some crisis issues, with headings: the causes of crisis, the definition of crisis according to Galen, the division of the

disease period, knowledge of laxatives, beginning of the crisis and its period, signs of death in patients, and causes of death, etc. This work was written in 1281 [10].

Asma al Advia

4

5

6

7

Asma al Advia is a dictionary of drugs, in which their Persian, Greek, Syrian, Roman, Arabic, and Egyptian equivalents are listed in an alphabetical order, if available. However, equivalents

Rokn Azam

Eksir Azam

Asma ol Advieh

Mohit Azam

are provided only for some names. The book lists only the names of drugs and their characteristics and uses. This book has 28 chapters in the number of Arabic letters. The date of writing this book is 1870 AD, which is mentioned at the end of the book. The author was not satisfied with quotations from his past and teachers and after comparing, he expressed his opinion and provided more correct comments. He also mentioned different equivalents of Iranian dialects.

Number Name of book Date Subject 1 Romouz Azam 1847 General Book on Medicine 2 Qarabadin Azam 1852 Pharmacopeia (combined drugs) 3 Naiir Azam 1854 Pulsology

Table 1. Collection of writings

1864

1868

1870

1879

Review of Sources Used by Hakim Azam Khan

Hakim Azam Khan Rampuri paid specific attention to the works of medicine, botany, and pharmacology researchers and benefitted from their works in his books. Here, we introduce some of such researchers in brief:

He has referred extensively to "Pharmacology in Medicine" by Mohamed bin Ahmed Abu Rayhan Al-Biruni (Demised in 1048 AD), the 10-11th century hakim, philosopher, scholar, and researcher [22]. In his "Great Elixir",

he makes numerous references to "The Secret Facts of Medicine" written in Arabic by Masud bin Mohammed Sajzi (Demised in 1333 AD). It is a medical vocabulary book containing medical terms [23]. "Niir Azam, he has benefitted from "Qanunshah in Medicine" by the physician and pharmacologist, Mahmud bin Mohammed al-Chaghmini (Demised in 1405/6 AD) [24]. In the first and forth volumes of "Great Elixir", "Qarabadeen-e-Azam", and "Mohit-e-Azam", he makes references to Atrilal Treatise by Hakim Emad al-Din Shirazi (Demised in 1591 AD), the

Crisis

Comprehensive Medical Encyclo-

pedia

Drug Names Dictionary

Pharmacopeia

physician and pharmacologist [9]. He has also made numerous references to "Tib-e-Akbari" and "Mizan al-Tib" by Mir Mohammed Akbar bin Mohammed Shah Arzani Shirazi (18th Century AD), hakim and physician of Akbar Shah Gurkani's court [25, 26]. Hakim Azam Khan has paid remarkable attention to the works of Hakim Alavi Khan Shirazi's family in his Great Elexir and quoted their works repeatedly in this book [12]. Hakim Azam Khan did not disregard the less-known authors, among which we may name:

- 1. Mir Hassan: He was a student of Alavi Khan's school. He has a book entitled "Mir Hassan's Medicine" in Urdu that is published in Pakistan. Nazim Jahan makes references to this book in his "Great Elixir".
- 2. Hakim Sanaullah of Bareilly: He was the instructor of Hakim Shabaz Khan, father of the author of "Great Elixir", Nazim Jahan. Hakim Sanaullah has written a book entitled "Sanai's Medicine" which is one of the sources referred to in "Great Elixir".
- 3. Hakim Nur al-Salam: He was the instructor of Hakim Mohammed Azam Khan, author of "Great Elixir".
- 4. Hakim Nurullah: He is the author of "Anwar al-Alaj" that is a reference of "Great Elixir". These scholars played an essential role in the foundation of Indian Subcontinent medicine, which shall be discussed in the following chapters [12].

Conclusion

Any language conveys the culture and social circumstances of those who speak it. Accord-

ingly, social evolutions, political changes, and development of the educational system can take place only through language and culture. History of India has been always overwhelmed by glory since the advent of the Persian language in this country, the glory which was affected severely by the arrival of British colonization. Changing India's official language from Persian to English deprived this country from a great ocean of invaluable works written in the Persian language. Many Persian speaking scholars and scientists defeated this British policy. Hakim Azam Khan, who lived a challenging life, is a distinctive figure in the history of Indian medicine who always attempted to safeguard these rich sources.

Hakim Azam Khan was born in a physician's family and learned medical science from the best teachers of his time such as Alavi Khan Manner (Aghili family). In addition to his personal experiences and his father's notes, he has named more than one hundred and fifty sources in his works. He was from Sistan (Iran) and lived in India. In his works, he has not merely mentioned the quotations. In addition to mentioning his experiences and his father's notes, in some cases he has criticized and reformed the comments from his predecessors. Due to the inability of people at his time to understand the Arabic phrases and the existing medical books, he wrote a comprehensive book entitled Exir Azam, which lasted for thirty years. The value of the book is due to the translation of Arabic texts and quotations from many Persian texts and more importantly, due to some manuscripts which are not available now. This book is the last major traditional medicine book in Persian, which has been written according to many ancient medicine sources in treatment of diseases and diet. Romouz Azam, Qarabadin Azam, Asma al-Advia Mohit Azam, Naiier Azam and Rokn Azam are his other works.

As we can see, Hakim Azam Khan was an expert in medicine as well as in compilation of books. He had an effective role in transferring his personal experiences from the ancients to next generations by creating his own works in Persian.

Conflict of Interest

None.

Acknowledgment

None.

References

- Azarshab MA, Homayuni S. Analyzing culture and its role in policy making/planning for language teaching: a case study of teaching arabic language in iran. Lang Sci 2016;3:116-189.
- [2] Valizade H. The study of revenue britain eastern india company in india. Tehran Islamic Azad University Central Tehran Branch, Tehran; 2014.
- [3] Ramadan Nia M. Persian from classical to foreign languages (The language policy of the East India Company in confronting the Persian language in the Indian subcontinent). National studies Quarterly 2010;11:55-80.
- [4] Seminar Introduction. Trading Places: The East India Company and Asia, a free seminar from the British Library on the history of the British East India Company.: Fathom; [cited 2020 6/30/2020]. Available from: https://web.archive.org/web/20061207090835/http://www.fathom.com/course/21701760/index.html.
- [5] Gardner B. The East India Company. Pajohesh. Tehran 2004.
- [6] Mirsharifi SA. The India That I Saw. Dalile Mah Publications. Qom.
- [7] Azam Khan M. Qarabadin Azam. Almaee. Tehran 2014.
- [8] Al-hasani AH. Nuzhatul-Khawatir (Biographies of Scholars and Eminent Persons of India From 1st-7th Century A.H 6th-13th A.D). The Dairatul-maarif-il-osmania (osmania

- oriental Publication Bureau). Hyderabad India 1962.
- [9] Imad'al-Din Shirazi Mu, Heravi MY. Ein-ol-hadyat Treatise Atrifel Institute of Medical History Studies, Islamic and Complementary Medicine, Iran University of Medical Sciences. Tehran 2007.
- [10] Azam Khan M. Naiir Azam. Almaee. Tehran 2010.
- [11] Hakim Nayeer V. History of Iran-Pakistan Medical Relations. Institute of Medical History Studies, Islamic and Complementary Medicine, Iran University of Medical Sciences. Tehran 2003.
- [12] Aghili Khorasani M. Kholase al-hekmah. Esmailian. Quom 2006
- [13] Azam Khan M. Mohit Azam. Almaee. Tehran 2015; pp 3,6,13,1677.
- [14] Mohaghegh M. Pure science from the beginning of Safavid to the foundation of the Dar ul-Funun. International Center for Dialogue among Civilizations. Tehran 2005.
- [15] Azam Khan M. Aksir Azam. Institute of Medical History Studies, Islamic and Complementary Medicine, Iran University of Medical Sciences. Tehran 2004.
- [16] Vanzan A. Persian is the language of medicine in muslim india. Iranshenasi 1995;7:188-196.
- [17] Akhtari E, Bioos S, Sohrabvand F. Infertility in iranian traditional medicine from hakim mohammad azam khan point of view. Iran J Obstet Gynecol Infertil 2015;18:18-23.
- [18] Kaveh S, Raghimi MC, Sadr S, Abbassian A, Kaveh N et al. The role of Honeywater (Maul Asl) in the treatment of respiratory diseases from Iranian Traditional Medicine (ITM) point of view. Med Hist 2015;7:29-50.
- [19] Pasalar M, Nimrouzi M, Choopani R, Mosaddegh M, Kamalinejad M et al. Functional dyspepsia: A new approach from traditional Persian medicine. Avicenna J Phytomed 2016;6:165.
- [20] Rezaeipour N, Jafari F, Nasseri M, Kamalinejad M, Rezaeizadeh H. "Ghola'a", a kind of oral ulcers and its treatment in the book of great elexir [Exir-e Azam]. Journal of Research on History of Medicine 2016;5:231-235.
- [21] Abdollahi M, Askari F, Badr P. Some point on the ethical regulations of the romuze azam book. JIITM 2016;24:276-297.
- [22] Al-Biruni Armia. Kitab al-Saydala fi Teb (Pharmacy in Medicine). Academy of Persian Language and Literature. Tehran.
- [23] Sajzi M. Haghayegh-e-Asrar-e-Teb. Jalal-ud-Din. Qom 2008.
- [24] Chaghmini M. Qanoonche Fi Teb. Abj publication. Tehran
- [25] Shah-Arzani M. Mizan al-teb. Jalal-ud-Din. Qom 2007.
- [26] Shah-Arzani M. Tibb-e-Akbari (Akbar's medicine). Jalal-ud-Din. Qom 2008.