

Role of Iranian Physicians in Flourishing Islamic Civilization

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Abstract: Flourishing civilization was obtained by cooperating of physicians, teachers, philosophers groups and all of scientists in fields of science, culture with different nationalities. In meantime Iranian physicians in cause of illustrious background in medical science in ancient ages of Iran had significant role in developing medical science in Islamic civilization. Iranian physicians at the beginning of Muslim conquest of Persia are at service of Muslims and through publishing book, translation, training students and curing people and caliphs served Islamic culture and civilization famous physician such as Bakhtyashu which graduated from Jundishapur and with their works because transferring medical experiments of other civilizations to Islamic world. The books which Jundishapur's physician published and translated were part of initial books which entered into Islamic civilization. Their publications were resources of famous physicians such as Zakaria Razi. Zakaria Razi and Abu Ali Sina that are most indexes Iranian physicians in Islamic world, helps to flourishing Islamic Civilization through their publishes and patents and medical discoveries which were unbeatable. Present research with descriptive-survey method and according to library resources dealt with role of Iranian physicians in flourishing Islamic civilization. Achieved results from this article shows that Iranian physicians had effective role in developing and flourishing in Islamic world in medical field through constructing hospital, translation and publishing many different books about ophthalmology, pharmacy, anatomy and specially their researches and publishes about leprosy, different between smallpox and measles, women illnesses spiritual illnesses, clinical medicine were part of initial researches conducted in Islamic world.

Key words: Islamic civilization, Iranian physicians, hospital, zakaria razi, bakhtyashu

INTRODUCTION

We cannot relate beginning of medical science to special civilization but can say that along with beginning of human life on earth, attention to health and increasing lifelong have attracted human attention. Also medicine in all of ages has been along with human because pains have been along with human. Therefore cure and solution has been in human mind as well (Dignity, 1963). Iranian was attending to medicine and has special dignity in their thought (Nadim and Ishak, 1946). As in Raam Yasht, Goosh Yasht and Fargerd 2 and Yadida, medicine have been related to Jamshid Asatiri and Shahnama have been emphasized on Jamshid relying on Divin force knows medicinal plants and propounds health and medicine (Ferdowsi, 1955). In historical periods, medicine has special dignity in ancient Iran while Xenophon remembers groups of physicians in Cyrus

the Great army. Also according to his works, Cyrus the great reintegrates medicine and medication in his country. Placed some of experienced physicians in special area, after each person had gets sick, any of physicians cures it. In Sasanian age after stablishing Jundishapur hospital, medicine science has been developed specially and this hospital was good environment for cooperating Greece, India, Syriac and Iranian physicians. Jundishapur physicians composed achievements of different civilizations together and after Muslim conquest of Persia through translation and publishing book transfer their knowledge to Islamic world. In fact Iranian physicians like bridge, became hybrid agent of medical experience of prior civilization with Islamic world (Elgood, 1951), they trough publishing and translating book and training students has significant role in flourishing Islamic medicine. Hence, in this research in cause of that Jundishapur physicians were in part of first pioneer of

servicing to Islamic civilization, at first dealt with dignity of physicians in Jundishapur the role of Iranian physicians in flourishing Islamic civilization have been examined.

JUNDISHAPUR HISTORICAL SNAPSHOT

As mentioned before, Iranian had similarity with medicine science and had attracted their attentions to the medicine while Siril Elgood (famous physician and orientalist) knows the dignity of physicians related to Iranian (Elgood) such as ministries like Divan Dorost Bod (14), variety mentions to physician and medicine in Avesta, many faculties of medicine of Saees in Egypt which was built by order of Darius.

Famous Egypt and Greece physicians like in Darius court (Herodotus, 1943) also Jundishapur faculty in Khuzestan and medicine school of Mazdisna and Ekbatan school (Hamedan) which has physicians in developed countries and studied, researches and publishes there (Najmabadi, 1934). All of that confirms claims of Cyril Allgood and high dignity of medicine in ancient Iran. Jundishapur University was one on of the most important educational and research centers in that age, many of scientists and physicians were studying there and promoted cultural aspects of that age. Date of constructing Jundishapur is not identify correctly but based on historians opinion, Shapur I fundamental scientific activities in this city. He accepted those physicians who sent by Julius Caesar, father of Shapur's wife dealt with developing Hippocratic medicine in east (Osibee, 1930). Shapur I was one of the knowledge lover lions in Sasanian age and was trying to gather different books in field of medicine, astronomy, Gem, creation, corruption and transformation which were scattered in India and Room. So sent some of Iranian scientists to Greece to translate and transferred those scientific and philosophic and medicine books from Greece to Pahlavi. And from this city the other people of ancient Iranian transcript scientific issues of these resources (Nadim and Ishak, 1946; Tafazoli, 1956). In age of Shapur II (310-379) also Theodorus was came to his court. He respects it and placed it in this city which dealt with medicine. And in cause of this physician they made Church and released many of its countryman's from prison (Elgood, 1951). Theodorus writes a book named "KonKaash" which after that

translated into Arabic (Nadim and Ishak, 1946). In fact we should know Shapur II founder of scientific activities in Jundishapur. Because he had many significant activities in field of translating medicine books and combining traditional medicine with Greece and Indian medicine. So according to Saalebi, Shapur II which in cause of illness brings an India physician, make him reach and accommodates him in Shush City and lead to increasing physicians from Shush Rather than Ahvaz and Pars, because they trained by this India physician and from he and Roma prisoners got enough knowledge and then transfers to other persons. Thus, in Sasanian age Indian medicine custom along with entering Indian physicians to Iran from Sanskrit language to middle Persian, to hospital and Jundishapur faculty came into Iran. In terms of medicine history, Khosro Anoshiran has considered as greatest Sasanian King (Elgood, 1951). Interest of Khosro Anoushirvan (531-579) to knowledge, accelerate to growing motion of Jundishapur and this University was known as biggest medicine center of ancient age. Attention to Scientifics of different nationalities in Anoushirvan age, in scientific center of Jundishapur and encouraging them because that Jundishapur be place of aggregation of Greece, Jewish, Christain, India and Iranian. And this reason helps to progression of scientific Khosro Anoushirvan, which was interest of medicine and even say that using Greece and India scripts wrote a book about medicine (Kazem, 1925). And try many activities in developing Jundishapur faculty. As group of Iranian scientific along with Borzuya to learn medical methods especially Indian plants medicine and brings India scientific books. In fact her interest to knowledge, leads to gathering and publishing works and these works have been storing in Jundishapur University (Nadim and Ishak, 1946). Also her interest into knowledge and scientific cause attracting scientists with different nationalities in her court, whereas group of Roman physicians in Justinian Age refuge to Khosro Anoushirvan court, which as teachers in Jundishapur medicine faculty, provides their knowledge to Iranian physicians (Sami, 1945). According to Al-Qifti report from 20th year of kingdom of Khosro Amnoushirvan, in request of 6351 his king, Jundishapur's physicians in a seminar issued about medicine knowledge and their speeches had recorded. This medical community in leadership of Dorostboz (master of physicians) had done. The

documents of this community had showed deep opinions of Jundishapur physicians. Based on expressions above, the medicine method of Jundishapur was consequated of experiences of Iranian, Greece and India medicine which this factor has effect of growing medical field and famous physicians like Bakhtyashu household and Al masuyeh which after Muslim conquest of Persia, achievements o their historical experiences in medicine have been transferred to Islamic world. Some of kings of Jundishapur were translating scientific famous works of the ancient world. Each year groups of researchers had graduated from that center and if they were foreign, moved to their country such as "Al-Harith Ibn Kalada "Arabic researcher which after passing educational course in this University, returned to their home.

Thus Jundishapur and its medicine faculty in late of Sasanian age achieved its fame and Khuzi physicians (Bakhtyashu and Al masuyeh) which have graduated from this University, was agent of knowledge and experiences of their ancestors to Islamic world and developing medicine in Iran.

ROLE OF IRANIAN PHYSICIANS IN FLOURISHING MEDICINE IN ISLAMIC CIVILIZATIO

After Muslim conquest of Persia the dignity of medicine have kept also attracted to medicine very well in this cause famous physicians like who graduated from Jundishapur have been at service of Islam and with translating Greece and India and Pahlavi into Arabic and publishing many books in different fields of medicine plays significant role in flourishing medicine in Islamic civilization Bakhtyashu household was one of the biggest and famous scientific and researchers households in Jundishapur which about six generations of them teaches and was physician there. Conversance of this household and their growth in determining, cure pations cause that serves Abbasi caliphs and besides medicine services to Abbasi caliphs, through their translation and publication, especially in field of medicine had significant role in progressing medicine science in Islamic civilization. People of this calif has published above of fourty book in different fields of medicine which their books was resources of great physicians like Razi and Abu Reyhan Biruni while Razi only in

Alhavi (one of his researches) refers at least 215 case to Khuzestan physicians (Rayhan, 1963). Besides Bakhtyashu household also Al Masouyeh was part of famous physicians in Jundishapur which serves Islamic civilization with publishing and translating books and the most famous physicians in this household was Youhana Ebn Masouyeh. Youhana forced their talent students to translating medical books of Greece scientifics. As a result many of Boghrat books and Jalinous through Hanin and Ishak and Sabet translated to Arabic (Moazenzadh, 1957; Sami, 1945). Of course Youhana was good translator and translates the philosophias books very carefully. In Haroonolrashid age dealt with translating ancient books, books that achieved in Amourieh and Anghareh (Youssef, 1951; Jaljal and Alandolocy, 1930). Hence, we can say that Yuhanna besides Syriac language was familiar with Arabic, Persian and Greece (Jalilian, 1392). Nadim and Ishak (1946) says that Yuhanna Ebn Masouyeh, was one of the senders of Maamoon to Rom empire for bringing scientific contents and documents (Nadim and Ishak, 1946). Yuhanna was famous along with middle ages translators named Great Masouyeh or "Yanus Damasnous" (Elgood, 1957). Youhana had about fifty books. These books almost included all of medical fields such as clinical medicine, mental and neurons illness, women illness, pharmacy, leprosy, anatomy and Almost all of these works had destroyed. And only contents of two works have been kept in Liden library which one of them was thesis about diet and others was briefly content about uncommon issues in Medicine (Elgood, 1951). The book of Yuhanna (Daghal ol Ghein) was the first book about ophthalmology and had attracted ancient physician's attraction and optometrists should learned and takes them an exam about that for receiving formal degree. In beginning of third century, Yuhanna the son of Masouyeh and his studeny, Honain the son of Ishak wrote single posts about ophthalmology. Although their books had wrote using Greece resources, but their knowledge showed very progression rather than Greeks contents. In other hand Yuhannas books with Jalinous and Dioscorides works was part of most important resources of Razi. And Raze in his work (Alhavi) had refers to many differnts books of Yuhanna about one thousand times Which these trust through Razi as a famous Muslim physician can be the best sign of scientific ability of Yuhanna (Ali, 1957).

OPHTHALMOLOGISTS

Muslims had published different books in fields of ophthalmology and phytology. In all of medicinal books, chapter about these two subjects had dedicated. One of the medicinal subjects that scientist and writers showed significant creativity, was ophthalmology. Variety and kinds of eye patients in different district of Islam and Iran cause that they attended to ophthalmology and related sciences. Abu rooh Mohammad Ibn Mansour which was known as Zarin Dast (it means Hand of Gold or expert) was one of the famous physicians in Malik Shah Iage, he wrote thesis of Noor ol Ein (Zarrinkoob, 1964). In this age Islamic and Iranian physicians had surgery cataracts with perfect trust (Zarrinkoob, 1967). In Islamic period the oldest thesis about ophthalmology had wrote by Hanin Ibn Ishak. In beginning of third century AH, Ibn Masouyeh and his student, Hanin Ibn Ishak had published special books about ophthalmology. Although, these almost was based on Greece resources, but knowledge of physicians had progressed rather than Greek physicians. Detecting some patients that were unknown before such as inflammation of the eye membrane (in Arabic equals Sabal) had surgery through physicians and dealt with curing patients. One of the most prestigious books about ophthalmology had published through Ali Ibn Issa named Tazkarato ol kahalein and was about describing 130 ophthalmology illnesses (Zarrinkoob, 1967).

PHARMACOLOGISTS

Islamic physicians had progressed in recognizing and applying drugs in Islamic period which had named "Seydaneh" or "Seydaleh" (10). Greeks only described 500 drugs, but Muslims detects about 1400 kinds of drugs and applied them to illnesses. And they divided into hybrid (composed) and simple. Pharmacology had near hybrid with phytology and with this cause in some books like "Ferdous ol Hakameh", "Alhavi" and "Law" several chapters had wrote about phytology and zoology. We can mention some of pharmacologist in third century such as Ebn Rabn Tabari" who wrote "Ferdous ol Hakameh" and "Bakhtiashu the son of Gabriel" who wrote "Nasayeh ol Rohban fel Advieh ol Mrakabah". Most fame and prestigious book about

pharmacology is "Jame olmofradat aladvieh o alaghzieh" wrote by Baitar" which introduced 1400 drugs (Velayati, cover1, 1384, Lucas, cover1, 1384 and Zarin Koob, 1384. Other Pharmacologists like Abobakr Akhvini Bokhari, in book of Hedaye ol motealemin, Abu Mansur Movaffak Harawiin book of Al abnieh o an haghayegh ol adviyeh, yaaghob ebn zakaria kaskariin book of Kankaash feltalaband Ahmad Ibn Abi al Ash'athin book of Aladviyah ol mofradeh had significant serve for developing health of people in field of ophthalmology in Islamic civilization period.

Abu Ali Sina through experiment and experience had test the effect of drugs and kind of drugs which he made. He brought first exact description from drugs such as Big Upiom, Great drug and confection of Firouz nosh. Abu Reyhan Biruni wrote the book of Seydaneh for recognizing drugs and how to dividing and use of kinds of drugs had described in this book (Zarinkoob, 1967). In book of Alhavi had wrote by Mohammad Ibn Rhazes, 700 kinds of drugs had mentioned and examined them. Islamic physicians had emphasized in needs to use of nature in curing many of patients. Also has significant skill in combining spices, creating drinks, drugs and confections. Islamic physicians published medicinal plants providing society health. In some area that had no physician, literate people teaches how to use of drugs to people. Also foods which had created through physicians had published in some books. Those foods was medicinal foods and for curing some of patients had used.

CONCLUSION

Medicine in ancient Iran had high dignity while in Iranian ancestors, in Avesta and other historic resources had referred to physician and high dignity of physician. Also in Achaemeneid empire had mentioned of existing physicians groups in Cyrus II Division and their familiar of them with medical plants and physician science in resources. In Great Darush age also famous Egypt and Greece physicians like in their court and in counselor dignity and physician of the King had served. Moreover in this period of time physician's schools named Mazdisna and Ekbatan School had exists which medicine field had teaches. Medicine had special dignity in Sasanian age, because in this period of time the Jundishapure University had

established and Sasanian's knowledge lover princesses especially Anushiravan provides conditions that physicians and experts comes from different countries such as India, Room, Syria and etc to this center and with teaching and publishing books, ancient experiences had transferred to Jundishapur. Also in this period physicians such as Barzouyeh had sent to India and for bringing scientific books (medicine) and translating and archiving them in Jundishapur, all of these factors cause medicine progressing in Iran. After Muslim conquest of Persia and Islamic advices about learning and religious tolerance, trained students in Jundishapur had serves Muslims and translated their ancient survived works from Pahlavi to Arabic and such as bridge became hybrid agent of experiences of ancient civilizations to modern Islamic civilization.

As Bakhtiashu and Al Masouyeh household helped to flourishing Islamic civilization by publish books and constructing hospitals. Bakhtiashu household published about above fifty books and Yuhanna the son of Masouyeh had published above fifty books in different field of medicine (leprosy, ophthalmology, pharmacy, anatomy, clinical medicine, women illness and which their books became resources of famous physicians such as Razi and Biruni. Razi refers to medicine in Alhavi about 215 times to Ghaal Khooz and about 1000 times to Yuhanna the son of Masouyeh which clearly shows the role and dignity of those physicians in growth and progressions of Razi. Razi and Abu ali Sina and other Iranian famous physicians with published and medicine innovations such as stitch with sheep gut through Razi and exploring stroke by Abu Ali Sina and detecting difference between smallpox and measles by Razi helped flourishing Islamic civilization. Iranian physicians used their innovations to cure of physical and mental illness. Also they cure mental illnesses. Some of physicians such as Razi recorded clinical observations. Muslims Ophthalmologists cures eye diseases such as cataracts. Developments of drugs and constructing drug stores and hospitals are parts of Islamic and Iranian physician's efforts which had significant role in developing health and flourishing Islamic civilization.

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