

The Great Founder of Medical Science

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Abstract: Great scientists are not born, they become in the process of life. In fact, every person from birth is endowed with certain talents, but not every one of them has an unusually strong character that moves them towards the achievement of goals.

Great scientists are not born, they become in the process of life. In fact, every person from birth is endowed with certain talents, but not every one of them has an unusually strong character that moves them towards the achievement of goals.

Hussein ibn Sino (Avicenna) is a scientist of the middle Ages, he had an unusually strong character and, even under the unfavorable conditions of that time, enriched world science with achievements of the greatest importance.

Even under the influence of many uncomfortable circumstances, Hussein ibn Sino fully showed his abilities, the life did not fail him. No matter how much hunger and cold he experienced, he did not lose his fortitude, faith and desire for the knowledge of being. Why? Because otherwise he could not. Only in this way, Hussein ibn Sino became a great scientist because he did not create and learn the material and spiritual world for the sake of fame or money.

The greatest doctor and thinker of his time, he subtly felt, at the subconscious level, the needs of the soul and body, how and in what direction the thought should move, which led him to the greatest scientific, cultural and spiritual results. Hussein ibn Sino remains a great figure to this day, demonstrating a person's ability for knowledge and spiritual growth.

The book "Ibn Sino. The Road to Immortality" is a biography of a man who felt early on that his vocation was medicine, but in order to realize himself as a healer, he had to make great efforts and overcome many serious obstacles. They form the plot of this book.

The action takes place between 980-1037AD, first in Afshan, then in Bukhara, Gurganj, Nisa, Nishapur, Gorgan, Ray, Qazvin, Hamadan and Isfahan, where Hussein ibn Sino (Avicenna) lived at that time.

The genre of the book is historical and adventure, X-XI centuries, Maverannahr, Khorezm, Khorasan, Persia.

The book of Professor D. Asadov, I. Ismoilov and K. Asadova "Ibn Sino. The Road to Immortality" tells about the biography and activities of the famous scientist, philosopher and healer Hussein ibn Sino (Avicenna).

Hussein ibn Sino, his full name was Abu Ali Hussein ibn Abdullah ibn Hassan ibn Ali ibn Sino, was an outstanding doctor of the Muslim world, he was born in 980 in the village of Afshan - an ancient village located 30 kilometers from the city of Bukhara, on the territory of the Peshkun region Bukhara region of Uzbekistan.

Abdullah ibn Hasan - Hussein's father was from the ancient city of Balkh, located 20 km northwest of the provincial capital Mazar-i-Sharif and 74 km south of the Amu Darya River. Abdullah ibn Hasan lived for some time in the village of Afshan, where he married a girl named Sitara-Bonu, translated from Persian means "Star", belonging to the glorious Turkic tribe "Ashina".

Hussein ibn Sino from early childhood had a unique memory, showed exceptionally bright abilities and talents. In an effort to cognize the world, he surprised others with his abilities, led everyone in amazement.

After moving to Bukhara in 986, Abdullah ibn Hasan took Hussein ibn Sino to an elementary Muslim school - maktab, where he had studied until he was 10 years old.

By the age of 10, he knew the Koran by heart and mastered verbal disciplines - grammar of the Persian and Arabic languages, poetics, rhetoric, literature and history.

It is believed that the well-known medical scientist of the era of the cultural upsurge of the Muslim world of the 9th-11th centuries Abu Sahl al-Masihi Gorgani (c. 971-1012) inspired him to medical studies.

An unexpected blow of fate forced Hussein ibn Sino to leave Bukhara and his love for science directed him to the ancient city of Gurganj to continue his activities, find new colleagues, friends and teachers.

When Hussein ibn Sino left Bukhara he was 22 years old. Young Hussein, possessing not only the highest talent, but also encyclopedic knowledge, entered the circle of intellectuals of the palace of Khorezmshah in 1002. Scientists of Gurganj greeted him warmly.

In 1012 Khorezmshah convened philosophers and familiarized them with a letter from Sultan Mahmud Ghaznevi - "We heard that there are several scholars in the service of Khorezmshah, each of whom has no equal in his field of knowledge. They must be sent to our court."

Khorezmshah said: "The hand" of Sultan Mahmud Gaznevi is strong, he has a large army. He has Khorasan, Hindustan, he intends to capture Iraq. I can't help but obey his will... What do you say to that?"

Hussein ibn Sino, did not want to go to the service of Mahmud Gaznevi, and together with his friend and teacher Abu Sahl al-Masihi in 1012 left the capital of ancient Khorezm - the hospitable Gurganj.

They decided to make the transition by a short trade and caravan route through the Sarykamysk hollow, the Kara Shor salt marshes, the dry bed of the Uzboy, the sands of Barsa-kelmes, which are constantly whirled by the wind, the swampy, fever-ridden places of Dehistan, and along the shore of the Caspian Sea to reach the port of Abeskun. From there, one day's journey to Gorgan!

But when crossing the Karakum desert, the travelers got lost. Unable to bear the hardships of the journey and the sandstorm, his friend Abu Sahl al-Masihi died in the arms of Hussein ibn Sino. Having buried their friends in the desert, Hussein ibn Sino and the guide found out that they were approximately 3-4 Persian farsakhs (12-16 miles) away from Nisa, a green city full of gardens.

After the city of Nisa, Hussein ibn Sino moved from city to city for a long time (Abevard, Tus, Nishapur, Shakkan, Samankan, Jadzhar), as Sultan Mahmud Gaznevi's sleuth servants did not let him breathe easy.

Hussein ibn Sino chose Gorgan (Pers. "Land of the Wolf") as a place of further residence - a small principality on the coast of the Caspian Sea. One of the significant events that took place in Gorgan for Hussein ibn Sino was his acquaintance with Abu Ubayd al-Juzjani, nicknamed Abdulvahid (Arabic origin, meaning Abdulvahid - Slave of Allah), who wished to devote his life to the famous scientist. Abu Ubayd al-Juzjani expressed his desire to learn philosophy and medicine from Hussein ibn Sino himself and accompanied the great scientist until the end of his life.

Hussein ibn Sino did not stay long in Gorgan. In 1013, as historians testify, fearing persecution by Sultan Mahmud Ghaznavi, he (he was 34 years old) left Gorgan and lived for some time in Raya and Qazvin.

After a short stay in Qazvin, around 1015-1016 AD he arrived in the city of Hamadan and entered the service of the Buyid ruler Shams ad-Dawla as a court physician. Then in 1019, for the successful treatment of the emir from a stomach disease, he received a high appointment and moved to the position of vizier.

During the 10 years of his stay in Hamadan, Hussein ibn Sino had created many works, including several volumes of the philosophical encyclopedia "Books of Healing", and also continued to write "Kitab al-Qanun fi-t-tibb".

In 1023, on false denunciations, the great healer was imprisoned in a zindan (underground prison), but after a few months he was released and reinstated in his former positions with an apology for the unfair attitude towards him. However, Hussein ibn Sino was shocked by unfair insults, and he, together with his faithful student Abu Ubayd al-Juzjani, secretly went to Isfahan in 1023, where he lived and worked until the end of his life (1023-1037).

The last fourteen years of his life (1023-1037) spent in Isfahan were the most fruitful for Hussein ibn Sino. The industriousness of Hussein ibn Sino was boundless both in mastering knowledge and in transferring it to his students and followers. He left behind a huge creative heritage - ancient sources attribute to him more than 450 works ranging in size from one sheet to 20 volumes in 29 fields of knowledge, 23 of them in Persian and Farsi, the rest in Arabic - the language of science and literature of that time. Many of them are lost forever, according to some information, only 276 have remained and reached our time.

He not only brought together the experience of Hippocrates, Galen, Egyptian, Persian and Indian healers accumulated before him in medicine, but also supplemented them with his valuable knowledge, the results of his own research, brilliant discoveries and hypotheses in the famous Kitab al-Kanun fi-t-tibb ” (“Canon of Medicine”), which has become the main manual for many generations of doctors in Europe and Asia over many centuries. According to UNESCO, even in the era of "modern medicine" at the University of Brussels, the work of Hussein ibn Sino was studied until 1909.

The result of the life of Hussein ibn Sino "*The Canon of Medicine*" ("Kitab al-Qanun fi-t-tibb") is a kind of medical treasure in which, with encyclopedic versatility, the ancient heritage of Persian, Greek, Roman, Arabic and individual elements from the experience of Indian, Chinese, Tibetan doctors and medical scientists. Here it is appropriate to quote the beautiful words of the doctor De Poor, who said: “Medicine did not exist before Hippocrates created it, it was dead before Galen revived it, it was dispersed before Rhazes (Ar-Razi) collected it, it was imperfect before Avicenna (Hussein ibn Sino) completed it."

"The Canon of Medicine" ("Kitab al-Kanun fi-t-tibb") is an encyclopedia! It brings together the prescriptions of ancient physicians, meaningful and revised in accordance with the achievements of medicine in the Middle Ages. Hussein ibn Sino wrote one chapter of this book in Gorgan, another in Raya, and the rest in Hamadan and Isfahan.

Hussein ibn Sino in the "Canon of Medicine", thanks to his genius, managed to organise and collate the entire spectrum of medical knowledge, and also introduced a lot of new ideas. He says that medicine is a science that learns the state of the human body in order to preserve health and return it if it is lost.

Hussein ibn Sino was a poetic scholar! A significant place in the scientific poetry of Hussein ibn Sino was occupied by poems on medical topics. His original work - "Al-Urjuza fi-t-tibb", the largest both in content and coverage of material, occupies a special place in his work, after the "Canon of Medical Science".

The poem "Urjuza about medicine" was a manual for doctors, therefore, the ideas of Hussein ibn Sino through this poem were shared even more widely than its author ever imagined.

He was a leader on many of the contemporary issues of medicine of his time- he pointed out the diseases of myocardial infarction; developed a whole doctrine of pulse diagnosis; separated smallpox from measles; substantiated that tuberculosis is a contagious disease; proposed a method of aligning the bones, which today is called the "Avicenna Method". Nine hundred years before Bennett, Husayn ibn Sino recounted what is now called "Bennett's fracture" (1882); used diagnostic palpation of the liver; recommended listening to the chest with the ear, tapping the stomach, distinguishing between the sound "skinskin" (dull) and "drum" (tympanic), preceded the methods of auscultation by R. Laennec and percussion by L. Aunbrugger; described many mental disorders; pointed out that there is a close relationship between health and the psyche; he was the first to establish that nerves provide muscle mobility and cause a feeling of pain; pointed out the importance of the problem of diabetes; speculated about invisible beings that could cause febrile illnesses and spread through air, water and soil; argued that an externally manifested disease necessarily has internal causes, and the symptoms indicate the action of the body's own forces, that show these signs, and looked for ways to stimulate them to fight the disease; paid attention to physical exercises, called them the most important condition for health, followed by diet and sleep; for the first time he formulated the principles of medicine: “Treat, first of all the patient, not the disease”, “Nature heals, and the doctor heals”, “Preventing a disease is easier than treating it”; he wrote that the main thing in the art of preserving harmony is the balancing of the necessary factors: the balance of nature; choice of food; good hygiene; preservation of physique; improving what is inhaled through the nose; fitting clothes; balance of physical and mental health; he invented various surgical instruments.

The great scientist also founded an observatory in Isfahan and proved the mobility of earth's orbit around the Sun, applied an original method called the "Nonius principle" - after the Portuguese scientist, who rediscovered this method only in the 16th century.

The foremost scientist of his time, Hussein ibn Sino, during his lifetime, was awarded the honorary titles "Hakimi Buzurg" (Great Healer), "King of Medicine", "Father of Medicine". In the Khorezm Mamun Academy he was called Hakim al-Wazir ("Prince of Doctors") and the disciples respectfully called him Master. In Europe, he was known as Avicenna, he was compared to Galen, and was called the “Galen of Islam”, sometimes called “princeps medicorum” (“Lord of Physicians”), also called the “prince of medical sciences”, He was given the title “Honor of the Kingdom”.

The great English philosopher Francis Bacon (1561-1626) called Hussein ibn Sino "the leader and head of the philosophers." The modern American scientist G. Hawzer called him the "Sun of the medical world."

- The French scientist Anna Marie Gouchon called Avicenna a genius, a prophet, "the first mind of mankind."
- According to academician orientalist E. E. Bertels - "Avicenna is an invisible hearth of underground fire, feeding a chain of fire-breathing peaks."
- The French historian of medicine D. Le Clerc figuratively, but very accurately, called Hussein ibn Sino an "intellectual miracle."
- The famous historian J. Sarton wrote: "Abu Ali ibn Sino (Avicenna) is the most famous Muslim scholar and one of the most famous people of all peoples and eras."
- According to the famous poet of Iran of the Seljuk era Avhaduddin Anvari, "the light of Abu Ali ibn Sino's eyes was created from the light of knowledge". The sympathy and respect of Avhaduddin Anvari for Hussein ibn Sino is so great that he puts his work "Kitab al-Shifa" higher than "Shahnameh" by Ferdowsi.
- The famous French physicist Frederic Joliot-Curie said: "All the activities of Ibn Sino are based on the requirements of truth and reason."
- "Not with the eye, but through the eye, the mind of Avicenna knows how to look at the world," said Hermann von Helmholtz.
- "A wise man with a deep memory, a sharp mind and a fiery heart" said Abu Sahl al-Masihi Gorgani.
- "A talented person is talented in everything" wrote Lion Feuchtwanger.
- According to S. M. Afnan, "there was not a single philosopher who would not have been influenced by his ideas", "The head, if not the heart, of East and West is dying".
- The well-known Algerian physician Ahmed Arua came to the conclusion that "Medical sciences as developed by Avicenna are free from all harmful interpretations that plagued the medicine of the ancient era, the echoes of which are still manifested in separate branches of modern medicine. Medicine has become a science - thanks to Avicenna".

The time of death of the Great scientist, Abu Ali ibn Sino, according to UNESCO is June 24, 1037. According to the Muslim calendar, the month of Ramadan, 428 and the place of death is the city of Hamadan, Iran.

Hippocrates, Galen, and the proud and rebellious intellectual of the East, Hussein ibn Sino, are undoubtedly the ideal role models for doctors on our planet.

The memory of the remarkable, benevolent, wise and confident, highly cultured scientist - naturalist, encyclopedist of the Middle Ages, will forever remain in the memory of peoples. It is dear to the progressive people of the world and belongs to all mankind.

The Swedish naturalist, physician, first president of the Swedish Academy of Sciences Carl Linnaeus (1707-1778), taking into account the merits and in recognition of the immortality of his ideas and glory in the field of science, to perpetuate the name of the scientist named the genus of an evergreen tropical plant of the Acanthus family, the name of Hussein ibn Sino - Avicennia (lat. Avicennia marina).

One of the minor planets of the Universe (asteroid-2755 Avicenna) discovered on September 26, 1973 by astronomer L. I. Chernykh was named after Hussein ibn Sino.

The crater "Avicenna" on the far side of the Moon (diameter 72.99 km, depth 27.7 m), named after the medieval astronomer and healer Hussein ibn Sino and approved by the International Astronomical Union in 1970.

In 2006, the mountain peak (height 7134 m) in the Pamirs was renamed after Hussein ibn Sino.

In Uzbekistan in 1956 a new mineral was found, which was called "Avicennit".

Monuments and busts to the great thinker and scientist were erected in the cities of Tashkent, Bukhara, Afshan, Shafirkan, Karshi, Navoi, Zarafshan, Namangan, Dushanbe, Khujand, Almaty, Karaganda, Moscow, Tuapse, Partenit, Kiev, Riga, Madrid, Cordoba, Kortrijk, Paris, Vienna, Hamadan, Ankara, etc.

Hospitals, polyclinics, rural medical centers, medical centers, diagnostic centers, sanatoriums, pharmaceutical plants, pharmacies, laboratories, firms, residential areas, streets, schools, lyceums, colleges,

institutes, universities, libraries, museums, magazines are named after the brilliant representative of the golden age of Islam, Hussein ibn Sino.

The films "Avicenna" (1956), "The Youth of a Genius" (1982), the Iranian television series "Avicenna" ("Bu-Ali Sina") (1987), "The Physician: Avicenna's Disciple", the documentary "Avicenna canon of immortality" (2018).

tell about the scientist's life from childhood to death and about his multifaceted activities.

Many video-films such as Avicenna. Light from the East (2010), Series "Abu Ali ibn Sina" (Avicenna), Islamic Videos (2014), "Wisdom of Ages", Ibn Sina (Avicenna), (2018) and many others were shot.

In many countries of the world, hundreds of books, banknotes, postage stamps dedicated to Hussein ibn Sino have been written and published. This list can be continued indefinitely.

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