

Arab and Muslim Physicians and Scholars

Ibn Sina (Avicenna): The Prince Of Physicians

Samir S. Amr,* Abdelghani Tbakhi †

From the *Dhahran Health Center, Saudi Aramco Medical Services Organization, Dhahran, Saudi Arabia and †Department of Pathology, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia

Correspondence and reprint requests: Samir S. Amr, MD Saudi Aramco P.O. Box 8341 Dhahran 31311, Saudi Arabia T: +966 3 877-6789 F: +966 3 877-6783 samir.amr@aramco.com

Ann Saudi Med 2007;27(2): 134-135

Abu Ali Al-Hussein Ibn Abdullah Ibn Sina, known in the West as Avicenna, was one of the most eminent Muslim physicians and philosophers of his days whose influence on Islamic and European medicine persisted for centuries. He was named by his students and followers as "Al Shaikh Al Ra'ees" or the master wise man. The Europeans called him the "Prince of Physicians". As a thinker, he represented the culmination of Islamic renaissance, and was described as having the mind of Goethe and the genius of Leonardo da Vinci.¹

Ibn Sina was born in 980 AD in the village of Afshanah near the city of Bukhara in Central Asia, the capital of the Samani kingdom at that time, in the present country of Uzbekistan. His father, Abdullah, was from the city of Balkh and worked as a local governor for a village near Bukhara. His mother was a Tadjik woman named Sitara. Abdullah realized that his son was a prodigy child and was keen on getting the best tutors for his genius son. At the age of ten, he finished studying and memorizing the Koran by heart and was proficient in Arabic language and its literature classics. In the following 6 years, he devoted his time for studying Islamic law and jurisprudence, philosophy, logic and natural sciences. At the age of thirteen, he started studying the medical sciences. By the age of eighteen, he was a well established physician and his reputation became well known in his country and beyond. He was quoted as stating that: "Medicine is no hard and thorny science like mathematics and metaphysics, so I soon made great progress; I became an excellent physician and began to treat patients using approved remedies".²

When the Sultan of Bukhara, Nuh Ibn Mansour of the Samanid dynasty, became seriously ill, Ibn Sina was summoned to treat him. After the recovery of the Sultan, Ibn Sina was rewarded and was given access to the royal library, a treasure trove for Ibn Sina who read its rare manuscripts and unique books thus adding more to his knowledge. After the Sultan's death, and the defeat of the Samanid dynasty at the hands of the Turkish leader



A portrait of Al Hussain Ibn Abdullah Ibn Sina

Mahmoud Ghaznawi, Ibn Sina moved to Jerjan near the Caspian Sea. He lectured there on astronomy and logic and wrote the first part of his book "Al Qanun fi al Tibb", better known in the West as "Canon", his most significant medical work. Later, he moved to Al-Rayy (near modern Tehran) and had a medical practice there. He authored about 30 books during his stay there. He then moved to Hamadan. He cured its ruler Prince Emir Shams al-Dawlah of the Buyid dynasty from a severe colic. He became the Emir's private physician and confidant and was appointed as a Grand Visier (Prime Minister). When Shams al-Dawlah died, Ibn Sina

Arab and Muslim Physicians and Scholars

wrote to the ruler of Isfahan for a position at his court. When the Emir of Hamadan became aware of this, he imprisoned Ibn Sina. While in prison, he wrote several books. After his release, he went to Isfahan. He spent his final years serving its ruler Emir Ala al-Dawlah. He died in 1037 AD at the age of 57. He was buried in the city of Hamadan. A monument was erected in that city near the site of his grave.

It is claimed that Ibn Sina had written about 450 works, of which 240 had survived.³ Some bibliographers list only 21 major and 24 minor works dealing with philosophy, medicine, astronomy, geometry, theology, philology and art. He wrote several books on philosophy, the most significant was "Kitab al Shifa" (The Book of Healing). It was a philosophical encyclopedia that brought Aristotelian and Platonian philosophical traditions together with Islamic theology in dividing the field of knowledge into theoretical knowledge (physics, metaphysics and mathematics) and practical knowledge (ethics, economics and politics). Another book on philosophy was "Kitab al-Isharat wa al tanbihat" (Book of Directives and Remarks).

However, his book *Al Qanun fi al Tibb* or simply the Canon is the most influential medical book ever written by a Muslim physician. It is a one million word medical encyclopedia representing a summation of Arabian medicine with its Greek roots, modified by the personal observations of Ibn Sina. This book was translated to Latin in the 12th century by Gerard of Cremona. It became the textbook for medical education in Europe from the 12th to the 17th century. It is stated that in the last 30 years of the 15th century, the Canon passed through 15 Latin editions and one Hebrew edition. The Canon is divided into five books, including medical therapeutics, with 760 drugs listed. The books are:

Book I:

Part 1:

The Institutes of Medicine: Definition of medicine, its task, its relation to philosophy. The elements, juices, and temperaments. The organs and their functions.

Part 2: Causes and symptoms of diseases.

Part 3: General dietetics and prophylaxis.

Part 4: General Therapeutics.

Book II: On the simple medications and their actions.

Book III: The diseases of the brain, the eye, the ear, the throat and oral cavity, the respiratory organs, the heart, the breast, the stomach, the liver, the spleen, the intestine, the kidneys and the genital organs.

Book VI:

Part 1: On fevers.

Part 2: Symptoms and prognosis.

Part 3: On sediments.

Part 4: On wounds.

Part 5: On dislocations.

Part 6: On poisons and cosmetics.

Book V: On compounding of medications.

In his book, Ibn Sina correctly documented the anatomy of the eye along with description of ophthalmic conditions such as cataracts. He stated that tuberculosis was contagious. He described the symptoms of diabetes, and gave descriptions of the types of facial paralysis. He described several psychiatric disorders including the so-called disorder of love, which he considered as an obsessive disorder resembling severe depression. He described a cachectic debilitated male patient with fever. By reaching to his loved one, he quickly regained his health and strength.⁴ Eight chapters in the Canon dealt with the functional neuroanatomy of the spine including the structure of the vertebrae and the various parts of the vertebral column and its biomechanics.⁵ Other authors wrote about Ibn Sina contributions to perinatal medicine, including binding of infants, their sleeping quarters, bathing and feeding as well as on causes of deformity.⁶ At the millenium of his birth in 1980, numerous articles were published in his honor in numerous languages, a tribute for this great Muslim physician.

REFERENCES

1. Smith RD: Avicenna and the Canon of Medicine: A millennial tribute. *West J Med* 1980; 133:367-370
2. Tan SY: Avicenna (980-1037): Prince of physicians. *Singapore Med J* 2002; 43:445-446
3. Namazi MR; Images in Psychiatry: Avicenna,

980-1037. *Am J Psychiatry* 2001; 158: 1796

4. Shoja MM, Tubbs RS: Images in Psychiatry: The disorder of love in the Canon of Avicenna (A.D. 980-1037). *Am J Psychiatry* 2007;164: 228.

5. Naderi S, Acar F, Mertol T, Arda MN: Functional

anatomy of the spine by Avicenna in his eleventh century treatise *Al-Qanun fi Al-Tibb* (The Canon of Medicine). *Neurosurgery* 2003; 52:1449-1454

6. Dunn PM: Avicenna (AD 980-1037) and Arabic perinatal medicine. *Arch Dis Child* 1997; 77: 75-76