Ibn Sina (Avicenna): The “Prince of Physicians”

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The Persian Muslim polymath Ibn Sīnā, known in the West by the Latinized name “Avicenna,” was born in approximately 980 CE in the village of Afshana, near the town of Bukhara in present-day Uzbekistan, a former capital of the Persian Samanid Empire. Avicenna’s father, Abdullāh, was a government tax collector and carefully supervised his son’s education. The boy was an eager student who memorized the Quran by age 10, learned arithmetic from an Indian grocer, and studied Islamic jurisprudence and philosophy with prominent scholars.

By age 16, Avicenna was already considered a master of theology, philosophy, mathematics, and astronomy, but he then turned his attention to medicine and qualified as a physician at age 18. Early on in his clinical practice, he treated a local governor (an emir) for a serious illness and as a reward was given access to the royal library of the Samanids, which unfortunately burned down shortly thereafter. Despite Avicenna’s enemies blaming this fire on him, he soon acquired a wide reputation as an excellent physician.

When Avicenna was 22, his father died, and shortly thereafter the Samanid empire fell to two rival Persian and Turkic empires (in approximately 1004 CE). In the following years, Avicenna moved between present-day Iran, Afghanistan, and Tajikistan, his fortunes rising and falling, eventually settling in Rey (near present-day Teheran), where the great Persian physician, Razi, had practiced a century earlier. After 1024, when the cities of Hamadān and Isfahan (both in present-day Iran) and served several emirs.

Avicenna was a prolific author. Because he wrote in Arabic, the lingua franca of the Islamic territories at that time, some later writers have erroneously described Avicenna as an “Arab physician.” Avicenna never stepped out of Persian territory, but was influential in medieval Europe, especially via his book Al-Shīfa (The Book of Healing) and his famous Canon (“Ghanon” in Farsi), a one-million word comprehensive and systematic encyclopedia of medicine. Avicenna’s Canon became a standard medical textbook in the medieval and early Renaissance period in Europe; and Avicenna was included in Limbo in Inferno — by 14th-century Italian writer Dante Alighieri — together with various other virtuous non-Christian thinkers, including Socrates, Homer, Ovid, and Virgil.

Avicenna believed that anatomy is the cornerstone of medicine. He recognized nerves and tendons as separate structures, and advocated repairing cut nerves and tendons separately. He described the compartment syndrome after limb injuries, as well as compression neuropathies and neuroma formation after nerve injuries. He recommended ligation of bleeding arteries and hypothesized that arterial repair might one day be possible, though nearly 1000 years would pass before Alexis Carrel in France developed vascular suturing techniques at the beginning of the 20th century.

Avicenna is also credited with describing thyroid-related orbitopathy and esophageal cancer, and with being the first physician to use a flexible catheter to relieve urinary retention and irrigate the bladder. However, despite a key plot element in the 1986 bestselling Noah Gordon historical fiction book The Physician — made into an award-winning German film in 2013, in which
actor Ben Kingsley starred as Ibn Sina — he did not discover the vermiform appendix.

Avicenna was a pioneer of what is now called “holistic medicine” and emphasized the role of the patient’s nutrition, spirit, emotional state, and environment in healing. In one famous anecdote, Avicenna diagnosed love-sickness in a patient. He examined the patient’s pulse and realized that the pulse fluttered whenever the patient heard the name of the district, street, and name of a girl he loved.

In approximately 1035 CE, at age 57, Avicenna died while travelling from Isfahan to Hamadan, Persia. His mausoleum is in Hamadan, Iran, and was rebuilt in 1952. Because of his achievements, Avicenna has been called by European physicians, “the prince of physicians.”

At least 26 countries in the Middle East, Africa, and Europe have honored Avicenna philatelically, some several times. Avicenna’s image is often used on postal stamps to commemorate scientific anniversaries and achievements. On March 5, 2013, for example, Iran issued a stamp (Scott #3083) that depicts Ibn Sina writing to commemorate the 1000th anniversary of publication of the Canon, and on August 22, 2004, Avicenna’s vignette appeared on an Iranian stamp issued on the occasion of International Avicenna Congress and Doctor’s Day (Scott # 2895, Figure).

Potential Competing Interests: The authors report no competing interests.

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