

Medicine stands still: Ancient and Islamic

KEY WORDS

Medicine: The science or practice of the diagnosis, treatment, and prevention of disease or a drug or other preparation for the treatment or prevention of disease.

The four humours: The belief that the body has four liquids (humours) which must be in balance to keep the body healthy.

Symptom: A physical or mental sign that something is wrong with the body or mind.

Caliph: The name given to the leader of Sunni Islam.

Diagnosis: When a doctor identifies the illness which a patient has.

Symptom: A physical or mental sign that something is wrong with the body or mind.

Secular: Something which is not connected to religion.

Baghdad: A city, which is now the capital of Iraq which was the largest city in the Islamic Empire during the Middle Ages.

Physician: A person who cures moral or spiritual ills; a healer, or a person qualified to practise medicine, especially one who specializes in diagnosis and medical treatment.

Encyclopedia: A book or set of books giving information on many subjects or on many aspects of one subject and typically arranged alphabetically.

KEY INDIVIDUALS

Hippocrates: Ancient Greek physician who created the theory of the four humours. Known as the father of Medicine

Galen: Physician in ancient Rome who developed Hippocrates' theories further (e.g. The Theory of Opposites) and wrote more than 350 books about medicine. His teachings were promoted by the Church because they fitted with Christian ideology.

Al Razi (Rhazes) and Ibn Sina (Avicenna): Al-Razi and Ibn Sina (also known as Avicenna) wrote huge medical encyclopaedias which contained the work of ancient writers along with their own knowledge.

Al-Zahrawi (Abulcasis): 'Father of modern surgery'. Wrote Al Tasrif. Invented 26 new surgical tools and techniques including ligature use.



Source Type

Author

Date

Purpose



Factors Question (16 marks + 4 SPaG)

Factors: War, Communication, Individual Genius, Religion, Government, Chance, Science and Technology

- 1) Was the preservation of the writings of the ancient Greeks and Romans the most important contribution that Islam made to medical progress?
- 2) Was religion the main factor in the development of ancient and Islamic medicine?

Significance Question (8 marks)

- 1) Explain the significance of the work Hippocrates on the development of surgery.
- 2) Explain the significance of Islamic medicine on the development of medicine.

Source C: A medieval drawing of Galen dissecting a pig in the second century AD.

Source Usefulness Question (8 marks)

- 1) How useful is Source C to a historian studying Galen's ideas about medicine and surgery?

Comparison Question

- 1) Compare the work of Hippocrates and Galen. In what ways are they **similar**?
- 2) Compare the work of Galen and Abulcasis. In what ways are they **similar**?

Key Events Timeline

KEY:

Surgery

Public Health

Disease

Factors



War



Religion



Chance



Communication



Government



Science and Technology



Individual Genius

Channel Theory (3300 to 525 BC)

Having observed the damage done to farmers' fields when an irrigation channel became blocked, the Egyptians developed the idea that disease occurred when an evil spirit called the Wehedu **blocked** one of the body's 'channels'.



Galen (130 AD - 210 AD)

Galen was a Roman doctor and surgeon. He had learnt his trade working with injured Roman gladiators. He took Hippocrates's findings on the four humours and built upon them. Human dissection was not allowed in Greek or Roman times as it was seen as an insult to the Gods but Galen had dissected wild animals. Indeed Galen is famous for his public dissection of a pig where he cut the pig's spinal cords to prove that movement and voice were controlled by the brain.

Galen's big idea was that every human being had their own unique mix of humours and that for perfect health all four humours had to be in perfect balance. It was believed that you only became ill once your humours went out of balance and if that happened then you had to rid yourself of the excess humour by sneezing and coughing to get rid of phlegm, vomiting to get rid of yellow or black bile or very seriously bloodletting with leeches/or opening veins to get rid of the excess blood humour. Galen also built on Hippocrates further when he introduced The Theory of Opposites. The theory was quite simple; if you showed evidence of one of the humours, then to recreate the balance, the treatment should be something that was directly opposite.



First Islamic Hospital (805)

The first Islamic hospital was founded in Baghdad in 805 and by the **1100s** every large town had a hospital.

Ibn Sina (Avicenna) (970–1037)

Ibn Sina (also known as Avicenna) wrote a huge medical encyclopedia known as the "Canon of Medicine". It collected the knowledge of ancient Greek and the Islamic world, and was used as the standard medical textbook for European doctors until the seventeenth century.



1000 AD

500BC

0

(476AD) The Fall of Rome

500AD

Hippocrates (460 BC-370BC)

The ancient Greek doctor Hippocrates is considered the father of modern medicine. Others may have been interested in medicine before him but he was the very first to have his views on medicine written down and preserved. Hippocrates and other ancient Greeks believed in an idea known as the four humours. It was a simple idea; the human body was made up of four things; blood, phlegm, yellow bile and black bile.

Hippocrates created the fundamental principles of being a doctor:

Respect for human life has to come first and even above the law. A doctor must never harm a patient in any of their treatment.

Hippocrates's clinical observation is still followed today. Doctors started by studying symptoms; heartbeat, temperature, breathing and urine and take notes of the patient's answers. They would then study the notes and compare with previous patient's suffering from similar conditions to predict what may be wrong and possible treatment.

Finally Hippocrates believed that nature was the biggest cure. Lots of rest and sleep. Plenty of fresh air and exercise will also help as too will a good healthy diet of fresh meat and vegetables. Ironically this is still seen as good common sense today.



Al-Razi (Rhazes) (865-925)

Rhazes was an Islamic Doctor who ran the Baghdad hospital, was the first author known to have written a book about children's diseases. He also explained the difference between smallpox and measles: this helped doctors diagnose the diseases.



Al-Zahrawi (Albucasis) (936-1013)

Al-Zahrawi (Albucasis) wrote an encyclopedia called "al-Tasirif" including a volume called "On surgery", which was the first medical book to contain pictures of surgical tools, providing clear information on how they were to be used. His book also gave practical guidance. It was widely translated and used across Europe until modern times.

