

History, Medicine through time

Lesson 1

Worksheet

How much medical progress did ancient Greece and Rome make?



Where was Ancient Greece?

Between 1000 BC and 300 BC Ancient Greece stretched over a much bigger geographical area than the Greece we think of today. It included land in modern Albania, Turkey, Italy, Spain and Africa. They developed cities mainly around the coast of the Mediterranean, so they could trade with each other.

In the early part of ancient Greece they explained many of the mysteries of nature, such as the changing of the seasons and the eruption of volcanoes, by the **actions of their Gods**. This is known as a **supernatural** belief.



What changed in Greek thinking?

Greek civilisation was at its height around 600-300 BC and science, philosophy and mathematics began to flourish and became important to many Greeks. They began to **replace the old supernatural explanations with rational ones**, produced and recorded, by thinkers called philosophers.

Hippocrates contributed to the development of the **rational tradition** of medicine. But it existed simultaneously alongside a supernatural tradition. Both sets of ideas developed and flourished at the same time in ancient Greece. We are going to focus on the development of the rational tradition, because of the influence it had in medieval Britain hundreds of years later as it is important to your course.



Who was Hippocrates?

Hippocrates was born in about 460 BC and was influenced by **Pythagoras**, who believed a healthy body was one of balance, of hot and cold, wet and dry, and that any imbalance was a sign of ill health.

Hippocrates and his followers wrote a series of books known as the **Hippocratic Corpus**. They are important because it shows us Greek medical thought for the first time. They also demonstrate a shift from **concentrating on the illness to concentrating on the patient**.

Hippocrates thought that ideas about causes of disease could apply to any case, he would rather that doctors observe each patient and the progress of their illness. He emphasised the importance of noting a patient's symptoms and only treating them once the observations supports their prognosis.



What was observation?

This system of **observation** was developed slowly over time and is what we now know as clinical observation. Hippocrates did not think doctors should depend on religious practices and he rejected magical cures.

A later Greek philosopher, Aristotle, developed this thinking further. He connected the idea of balance of the body *with* observation, and developed the thinking of the **four humours**. In the theory the four humours imbalance was seen as a *cause* of disease not a symptom.



What did Romans believe?

Rome had conquered the Greek cities in Italy by 275BC. This was a strong city state that wanted to expand. It was successful, and ruled a growing **empire** which had a vast geographical and influential reach that was *far superior* than that of the Greeks. The Empire was ruled **centrally** from Rome. To maintain control they had to keep their army healthy, and they were also practical builders.

Romans believed in **prevention rather than cure** of disease. Many Romans also believed in **observation** and this led to a focus on **public health** that saw them draining huge swamps and undertaking engineering projects that benefitted health. Sewers were used to take waste away from towns, and aqueducts were used to bring pure water into towns.



Who was Galen and why was he important?

Galen was an important doctor of the Roman empire, he was born in Greece (modern Turkey) around AD129. He became a doctor that treated gladiators, this meant that he gained a huge amount of knowledge of **anatomy** through this work. He also had studied human skeletons in **Alexandria**, a town known for medical advancement in surgery. He later went to Rome and became the doctor for the Emperor's son. This meant he could afford the time to write *over 100 books*. He *expanded on* the theories of Hippocrates and Aristotle. Galen's persuasive style and the fact that he focused on only his successful cases. Also the idea that there was '*the creator*' supported religious beliefs and therefore his ideas were picked up and spread through religions, such as Christianity and Islam, and would remain central thinking in medicine for hundreds of years.



Extension task information

Limitations on medical progress

In Greece, the supernatural beliefs associated with health continued. Many believed that making a sacrificial offering to a god, or visiting a religious site to cure the sick, would help them more than by following new rational ideas. Some of these continued into the middle ages, such as sick people making pilgrimages to religious sites to be cured.

Throughout most of the Roman empire human dissection and research using skeletons were forbidden, due to religious grounds. This led to medical ignorance around human anatomy and led to misconceptions emerging. For example, Galen placed greater importance on parts found in certain animals that he dissected, such as the *rete mirabile* in the brain, which was not found in humans.



Glossary

Supernatural - Outside the world as we know it, usually involving Gods and unknown forces.

Rational - Ruled by reason, the beginnings of a more scientific approach.

Public health - the health of a population as a whole, subject to government/ central support and regulation.

Anatomy - The study of the internal workings of something, e.g. humans or animal.

Dissection - The act of internally examining something, e.g. human or animal.



Comprehension Questions

1. How did ideas change during Ancient Greece?
2. What did Hippocrates believe about medicine?
3. What did the Romans think caused disease?
4. What made Galen a successful doctor?
5. Challenge question: How much medical progress do you think the ancient Greeks and Romans made?

Once you have completed your answers, resume the lesson to find out how you got on and hear some more.

