

Ancient Medicine

Martyn Shuttleworth 104.5K reads

The History of Medicine

The history of medicine is a long and distinguished one, as healers sought to alleviate illnesses and fix injuries since the dawn of humanity.

Shamen and pagan priests used a blend of rituals and medical techniques, to cure ailments. Amongst the ritual and magic, they sometimes arrived at a cure that passed into oral tradition and memory.

Herbs, acupuncture and prayer were commonly used to heal and, whilst eastern practitioners certainly contributed greatly and participated in the sharing of knowledge along the ancient Silk Route, the scope of this article will concentrate on a Euro-centric approach. This western bias also includes the Ancient Egyptian medicine and the Middle East.



The banner features the Explorable logo at the top center, with the text "Quiz Time!" in a stylized font below it. Below the text are three quiz cards. The first card shows a pair of red roller skates on a wooden deck, with the text "Quiz: Psychology 101 Part 2". The second card shows a fan of colorful pencils, also with the text "Quiz: Psychology 101 Part 2". The third card shows a Ferris wheel at sunset, with the text "Quiz: Flags in Europe". To the right of the cards is a link that says "See all quizzes =>".

The History of Medicine and Ancient Egyptian Medicine

Due to the hot and dry climate in Egypt, ancient papyri have survived intact, allowing historians to study the sophisticated techniques employed by Ancient Egyptian physicians. Whilst couched in magic and ritual, the Egyptians possessed a great deal of knowledge of healing herbs and repairing physical injuries, amongst the normal population and the workers

responsible for building the great monuments of that nation.

Modern research [1] has shown that these builders were not slaves but highly respected and well-treated freemen, and the care and treatment given for injuries and afflictions was centuries ahead of its time. Early paid retirement, in case of injury, and sick leave were some of the farsighted policies adopted by Ancient Egyptian medicine, luxuries that would rarely be enjoyed by most workers until well into the 20th Century.

The Egyptians made sure that the laborers were fed a diet rich in radish, garlic and onion, which modern researchers have found to be extremely rich in Raphanin, Allicin and Allistatin. These powerful natural antibiotics would certainly help to prevent outbreaks of disease in the often-crowded conditions of the workcamps.

Cropped version of image of a prosthetic toe from ancient Egypt, now in the Egyptian

Ancient Egyptian practitioners were also adept at performing eye-surgery, no surprise in the desert where foreign objects blown into the eye could cause irritation. Innovatively, the Egyptian doctors cured Night-Blindness by feeding the patient powdered liver, rich in Vitamin A.

The physicians drew upon a great store of knowledge in the Peri-Ankh, the Houses of Life; here, students were taught and papyri documenting procedures were stored. Physiotherapy and heat-therapy were used to treat aches and pains, and Ancient Egyptian medicine included repairing and splinting broken bones, as shown by successfully healed skeletons. Priest-doctors also practiced amputation, using linens and antiseptics to reduce the chance of infection. Edwin Smith papyrus, the world's oldest evidence of surgical and medical treatment, written in ancient Egypt around 1600 B.C. (Public Domain)

Anecdotal evidence shows that the Ancient Egyptian physicians adopted an ethical code centuries before the Hippocratic Oath, with one such inscription stating that 'Never did I do evil towards any person' on the tomb of Nenk-Sekhmet, chief of the Physicians during the 5th Dynasty [2].

The information remaining about the medicines and herbs used by the Egyptian physicians is remarkable. Whilst some of the most outlandish cures had little effect, many of the herbs they used have been shown to have positive effects upon ailments and are still used by modern herbalists, thousands of years later.

- **Honey:** An excellent antiseptic, used to treat wounds, and an ancient cure that is now increasingly used by the British Military to treat burns.
- **Willow:** A concoction of this was used to treat toothache and willow bark formed the basis of modern aspirin.
- **Mint:** Used to treat gastric ailments and mint is another cure that is still used today.
- **Pomegranate:** Used to treat infestations of parasitic worms, and modern scientists have

George Ebers papyrus from the US National Medical Library at the National Institutes of Health. This papyrus recounts the case of a "tumor against the goddess Yenus." The recommendation is to "do thou nothing there against." It is also noted that the heart is the center of the blood supply, with vessels attached for every member of the body. (Public Domain)

The Ancient Egyptians also practiced dentistry and were fully aware of draining abscesses, extracting teeth, and even making false teeth.

The Egyptian physicians knew how to suture wound, placing raw meat upon the wound to aid healing and stimulate blood production. They also used honey, known for its antiseptic qualities and ability to stimulate the secretion of infection-fighting white blood cells. Ancient Egyptian priest-doctors used moldy bread as an antibiotic, thousands of years before Fleming discovered penicillin.

Much of the Egyptian knowledge of physiology undoubtedly derived from their practice of embalming the dead, which allowed them to study the structure of the body. They made some accurate observations about which part of the body was responsible for certain tasks and, despite some inaccuracies due to the limitations of their equipment, they were fine physicians and were unrivalled until the Islamic Golden Age. Ancient Egyptian medicine outstripped both the Romans and Greeks in the level of knowledge and sophistication.

Hippocratic Oath. 'Twelfth-century Byzantine manuscript the oath was written out in the form of a cross, relating it visually to Christian ideas from the Pope Biblioteca Vaticana. (Public Domain)

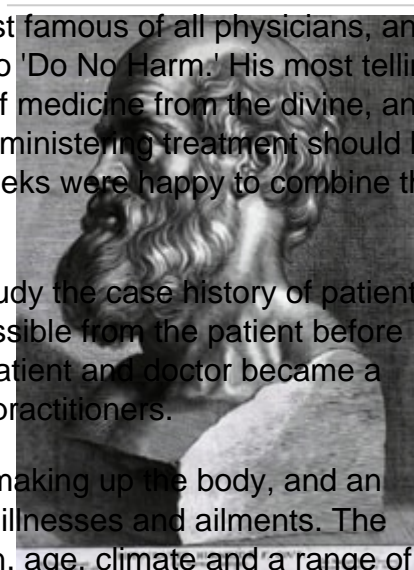
The Ancient Greeks, some 1000 years before the birth of Christ, recognized the importance of physicians, as related in the works of Homer, injured warriors were treated by physicians. They continued to develop the art of medicine and made many advances, although they were not as skilled as the Ancient Egyptians, whom even Homer recognized as the greatest healers in the world. Whilst they imported much of their medical knowledge from the Egyptians, they did develop some skills of their own and certainly influenced the course of the Western history of medicine.

The Greeks tended to believe that most ailments could be healed by prayers to the God of Medicine, Asclepius, and the great temples, known as Aesclepiions, were where many Greeks went to seek healing, making sacrifices and prayer to the god in return for having their ailments healed.

However, this all changed with Hippocrates, one of the most famous of all physicians, and his famous oath is still used by doctors today, as they pledge to 'Do No Harm.' His most telling contribution to the history of medicine was the separation of medicine from the divine, and he believed that checking symptoms, giving diagnoses and administering treatment should be separated from the rituals of the priests, although most Greeks were happy to combine the two and hedge their bets.

Greek doctors, influenced by Hippocratic thought, would study the case history of patients, asking questions and attempting to find out as much as possible from the patient before arriving at a diagnosis. This two-way interaction between patient and doctor became a foundation of the history of medicine, still used by modern practitioners.

The Ancient Greeks believed that there were four humors making up the body, and an imbalance in these would lead to both mental and physical illnesses and ailments. The balance of these humors would be affected by diet, location, age, climate and a range of other factors, and Ancient Greek medicine was based upon restoring the balance.



Hippocrates Bust (Public Domain)

The Four Humors were:

- **Sanguine:** The blood, related to the element of air and the liver, dictated courage, hope and love.
- **Choleric:** Yellow bile, related to the element of fire and the Gall Bladder, could lead to bad temper and anger, if in excess.
- **Melancholic:** Black bile, associated with the element of earth and the spleen, would lead to sleeplessness and irritation if it dominated the body.
- **Phlegmatic:** Phlegm, associated with the element of water and the brain, was responsible for rationality, but would dull the emotions if allowed to become dominant.

Many of the Greek herbal remedies and medicines were based around restoring the balance of humors, and this belief continued in European thought well into the Middle Ages.

The Greeks were also surgeons and some of the equipment they used is recognizable today. Some of the tools of the Greek physicians included forceps, scalpels, tooth-extraction forceps and catheters, and there were even syringes for drawing pus from wounds. One instrument, the spoon of Diocles, was used by the surgeon Kritoboulos, to remove the injured eye of Phillip of Macedon without undue scarring. Finally, the Greeks knew how to splint and treat bone fractures, as well as add compresses to prevent infection.

The Egyptians and the Greeks lay at the root of the modern history of medicine, understanding the value of cleanliness, medicines and the finer arts of surgery. Their knowledge passed down to the Romans, who preserved the medical skills and refined them.

The Romans and the History of Medicine

The Roman contribution to the history of medicine is often overlooked, with only Galen, of Greek origin, believed to be notable of mention. However, this does the Romans a great disservice and they put their excellent engineering skills to use in preventative medicine. The Romans understood the role of dirt and poor hygiene in spreading disease and created aqueducts to ensure that the inhabitants of a city received clean water. The Roman engineers also installed elaborate sewage systems to carry away waste. This is something that Europeans did not fully understand until the 19th Century; before this period, sewage was still discharged close to drinking water.

The Romans may not have understood the exact mechanisms behind disease but their superb level of personal hygiene and obsession with cleanliness certainly acted to reduce the number of epidemics in the major cities. Otherwise, they continued the tradition of the Greeks although, due to the fact that a Roman soldier was seen as a highly trained and expensive commodity, the military surgeons developed into fine practitioners of their art. Their refined procedures ensured that Roman soldiers had a much lower chance of dying from infection than those in other armies.

When mentioning the Roman influence on the history of medicine, the physician Galen is the most illustrious name. This Greek, granted an expensive education by his merchant father, studied in the medical school at Pergamum and frequented the Aesclepiions. In AD161, Galen moved to Rome, where he acted as physician to the gladiators, which allowed him to study physiology and the human body.

Later he committed his findings into writing and produced many works about human

physiology and the treatment of ailments. As his fame grew, as a physician and lecturer, he became the personal physician of three emperors, Marcus Aurelius, Commodus and Septimus Severus.

When the Roman Empire split into the Western and Eastern Empires, the Western Empire, centered on Rome, went into a deep decline and the art of medicine slowly slipped away, with the physicians becoming pale shadows of their illustrious predecessors and generally causing more harm than good. Western Europe would not appear again in the history of medicine until long after the decline of Islam.

In the Eastern Empire, based on Byzantium, physicians kept the knowledge and the skills passed from the Romans and the Greeks. This knowledge would form the basis of the Islamic medicine that would refine and improve medical techniques during the Islamic domination of the Mediterranean and Middle East. The history of Medicine would center on the Middle East and Asia for the next few centuries.

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