

History of Medicine

Greco-Roman

Alexandrian Greek medicine influenced conquering Rome despite initial resistance from the Romans. Asclepiades of Bithynia was important in establishing Greek medicine in Rome in the 1st century bc. Asclepiades taught that the body was composed of disconnected particles, or atoms, separated by pores. Disease was caused by restriction of the orderly motion of the atoms or by the blocking of the pores, which he attempted to cure by exercise, bathing, and variations in diet, rather than by drugs. This theory was revived periodically and in various forms as late as the 18th century.

Galen of Pergamum, also a Greek, was the most important physician of this period and is second only to Hippocrates in the medical history of antiquity. His view of medicine remained undisputed into the Middle Ages (5th century to 15th century). Galen described the four classic symptoms of inflammation and added much to the knowledge of infectious disease and pharmacology. His most important work, however, was in the field of the form and function of muscles and the function of the areas of the spinal cord. He also excelled in diagnosis and prognosis. Some of Galen's teachings tended to hold back medical progress, however, such as his theory that the blood carried the pneuma, or life spirit, which gave it its red color. This theory, coupled with the erroneous notion that the blood passed through a porous wall between the ventricles of the heart, delayed the understanding of circulation and did much to discourage research in physiology. The importance of Galen's work cannot be overestimated, however, for through his writings knowledge of Greek medicine was subsequently passed to the Western world by the Arabs.

While the Romans learned most of their medical knowledge from Egypt, Greece, and other countries that they conquered, their own contributions involved sanitation and public health. Roman engineers built aqueducts to carry pure water to residents of Rome, a sewage system to dispose of human wastes, and public baths. These measures helped to prevent infectious diseases transmitted by contaminated water.

The gradual infiltration of the Roman world by a succession of barbarian tribes was followed by a period of stagnation in the sciences. These invasions destroyed the great medical library in Alexandria (Alexandria, Library of) and many of its books and medical manuscripts were lost. Western medicine in the Middle Ages consisted of tribal folklore mingled with poorly understood remnants of classical learning. Even in sophisticated Constantinople (now Istanbul), a series of epidemics served only to initiate a revival of magical practices, superstition, and intellectual stagnation.