Drugs History books

Humans have always experimented with substances derived from minerals, plants, and animal parts to treat pain, illness, and restore health. In ancient Egypt, physicians prescribed figs, dates, and castor oil as laxatives and used tannic acid to treat burns. The early Chinese and Greek pharmacies included opium, known for its pain-relieving qualities, while Hindus used the cannabis and henbane plants as anesthetics and the root of the plant Rauwolfia serpentina, which contains reserpine, as a tranquilizer.

A school of pharmacy established in Arabia from 750 to 1258 AD discovered many substances effective against illness, such as burned sponge (which contains iodine) for the treatment of goiters-a noncancerous enlargement of the thyroid gland, visible as a swelling at the front of the neck. In Europe, the 15th century Swiss physician and chemist Philippus Aureolus Paracelsus identified the characteristics of numerous diseases such as syphilis, a chronic infectious disease usually transmitted in sexual intercourse, and used ingredients such as sulfur and mercury compounds to counter the diseases.

During the 17th and 18th centuries, physicians treated malaria, a disease transmitted by the bite of an infected mosquito, with the bark of the cinchona tree (which contains quinine). Heart failure was treated with the leaves of the foxglove plant (which contains digitalis); scurvy, a disease caused by vitamin C deficiency, was treated with citrus fruit (which contains vitamin C); and smallpox was prevented using inoculations of cells infected with a similar viral disease known as cowpox. The therapy developed for smallpox stimulated the body's immune system, which defends against disease-causing agents, to produce cowpox- and smallpox-specific antibodies.

In the 19th century scientists continued to discover new drugs including ether, morphine, and a vaccine for rabies, an infectious, often fatal, viral disease of mammals that attacks the central nervous system and is transmitted by the bite of infected animals. These substances, however, were limited to those occurring naturally in plants, minerals, and animals. A growing understanding of chemistry soon changed the way drugs were developed. Heroin and aspirin, two of the first synthetic drugs created from other elements or compounds using chemical reactions, were produced in the late 1800s. This development, combined with the establishment of a new discipline called pharmacology, the study of drugs and their actions on the body, signaled the birth of the modern drug industry.