



Milestones in the History of Therapeutics

Ahmed N^{1*}, Meshali M², Abdelmalek H³, Ebaya M⁴, Abu Alatta A⁵, Rashad Z⁶, Eltaweel O⁷, Rashad N⁸

Abstract

Since ancient Egyptians people search for treatments as in Edwin Smith papyrus about medicinal encyclopedia and pharmacopeia. So, the new generations should be aware of the Milestones in the history of therapeutics.

Keywords: Therapeutics; Ancient; Diseases; Herbal.

Introduction

Since ancient Egyptians people search for treatments as in Edwin Smith papyrus about medicinal encyclopedia and pharmacopeia [1]. Fleming said I did not invent penicillin. Nature did that. I only discovered it by accident [2].

Viewpoints

Therapeutics has been central to the medical enterprise in all times and all places however all too often neglected by historian [3]. The usage of biological products is as old as medicine itself, as humans have been using plant and animal products to treat disease for thousands of years [4]. Therapeutics definition is treatment and care of a patient for the purpose of both preventing disease and Alleviating pain. The term comes from the Greek therapeutikos, which means inclined to serve [5]. Traditional Chinese medicines were developed as early as 3500 BC, and many are still available today. The Chinese pharmacopoeia is quite large. Some of these herbal medicines contain active ingredients used in modern medicine, including reserpine(antihypertensive)originally derived from Rauwolfia evergreen trees and shrubs. Development of medicines was also in Egypt by 3000 BC, Ebers's papyrus contained 877 prescriptions for various maladies, including gynecology, eye and skin problems. These Egyptian remedies were frequently based on herbal materials such as castor oil, aloe, and frankincense. Indian folk remedies also existed 3000 to 5000 years ago and are referred to as Ayurvedic medicine. Recorded in Vedas, they were based primarily on herbal preparations, including cardamom and cinnamon. Some Ayurvedic ingredients are still used.

The Greeks drew from Egyptian, Chinese, and Indian medical ideas to develop their own medicinal treatments. Importantly, Greek society advanced medicine and drug development by rejecting the notion that diseases are caused by supernatural causes or spells In fact, they concluded that diseases arise from natural causes that could be treated with their medicinal formulations.

The Romans also developed their own medicinal treatments, led by Claudius Galen who wrote on all aspects of medicine in 400 different manuscripts. Later, moved to the Arab world. Starting in the fourth century, Greek and Roman medicinal development was completely neglected in Europe, as the use of folk remedies in the west became branded as witchcraft and sorcery. During this time period, known as the Dark Ages (5th to 15th

Affiliation:

¹Internal Medicine Department Hepatology and Gastroenterology unit, Faculty of Medicine, Mansoura University ²Department of pharmaceutics, Faculty of Pharmacy, Mansoura University

³Clinical Pharmacology Department, Faculty of Medicine, Mansoura University

⁴Research Fellow PhD Microbiology and Immunology Specialized Medical Hospital Mansoura University

⁵Board certified pharmacotherapy specialist (BCPS)

⁶Freelance Dentist

⁷Pharmacy intern

⁸Dental intern

*Corresponding author:

Prof. Nancy Abdel Fattah Ahmed, Internal Medicine Department Hepatology and Gastroenterology unit, Faculty of Medicine, Mansoura University, Egypt.

Citation: Ahmed N, Meshali M, Abdelmalek H, Ebaya M, Abu Alatta A, Rashad Z, Eltaweel O, Rashad N. Milestones in the History of Therapeutics. Journal of Molecular Biosciences and Therapeutics. 17 (2026): 51-52.

Received: July 14, 2026

Accepted: July 17, 2026

Published: July 22, 2026

centuries), Europe was ravaged by leprosy, tuberculosis, smallpox and bubonic plague. One prevailing attitude during this time was that disease was God's punishment for sin. Treatment of disease through development of new herbal remedies may have been very difficult in this environment, especially since practitioners of these remedies were seen as heretics. The loss of knowledge of folk medicines and progressive medical treatment during the plague period in Europe is an important example of how unscientific opinion can hamper significant medical progress.

The development of medicinal remedies in Europe restarted during the renaissance (14th to 17th centuries) Paracelsus brought opium into the European pharmacopoeia in the early 16th century, and he also developed the modern concept of dose dependency for drug action and toxicity. He used metal salts for treatment, especially those of mercury for treatment of syphilis, developing the predecessor of current chemical therapeutics.

later, English physician Thomas Sydenham introduced Laudanum, a mixture of opium and herbal ingredients. It was widely used for a variety of ailments in Europe until the middle of the 19th century, when the emerging science of chemistry began to guide the development of medicines. The extraction of morphine from opium in 1806 by Friedrich Sertürner launched the first generation of true drugs. Between 1820 and 1850, numerous drugs were isolated and evaluated using Sertürner's experimental method. Although advances were made in the 19th century, only a few true drugs were available at the beginning of the 20th century. Scientific method then began to drive drug development, with systematic research leading to the synthesis of drugs via chemical methods, Nowadays, hundreds of companies have more than 7,000 medicines in development. The Food and Drug Administration has approved more than 500 new drugs since 2000. This pace is due to the use of biotechnology. Many of the medicines are modified molecules derived from biological sources [6].

Conclusion and Recommendations

The evolution of pharmaceuticals is a testament to human ingenuity and our relentless quest for better health.

From herbal remedies to biotechnology, the journey of pharmaceuticals has transformed the practice of medicine and saved countless lives. The future holds immense promise for the development of new treatments to improve the lives of people around the world [7]. So, the new generations should be aware of the Milestones in the history of therapeutics.

Acknowledgment

Thanks to anyone helps to convey our message to the public.

Funding

No funds or grants were received from anyone or anywhere.

Ethics approval and Consent for publication

Not applicable.

Conflicts of Interest

The authors had no Conflicts of interest.

Data Availability

The datasets are available from the corresponding author on reasonable request.

References

1. Ahmed NAF. Pharaohs and medicine: Fact or fiction? J Modern Med 3 (2026): 9-11.
2. Ahmed N., El- Demerdash F., Azzam F., Hamed M., Shiha G., et al. Riveting stories in medicine: a relic from the past or a hope for the future? International Journal of Clinical Case Reports and Reviews 33 (2025).
3. Essays in the History of Therapeutics.
4. The History of Biologics: Problems, Perseverance and Potential.
5. Therapeutics.
6. The History of Therapeutic Drug Development.
7. The Evolution of Pharmaceuticals: From Ancient Remedies to Modern Marvels.



This article is an open access article distributed under the terms and conditions of the [Creative Commons Attribution \(CC-BY\) license 4.0](https://creativecommons.org/licenses/by/4.0/)