

STUDYING THE PROGRESS OF SCIENCE AND ITS SHORTCOMINGS



PHASES IN THE EVOLUTION OF MEDICAL HISTORY

Komilov Nodirbek Bokijonovich

Doctor of Pedagogical Sciences (DSc), Associate Professor Fergana medical institute of public health

Annotation. This article reflects on the stages of development of the history of medicine, and provides information on the research conducted within this discipline.

Keywords: trend, methodology, medical deontology, medical practice, social principle, humanities, empirical research, didactic opportunity.

The history of medicine has evolved over centuries, reflecting humanity's ongoing quest to understand health, disease, and healing practices. The evolution of medical knowledge and practices can be divided into distinct phases, each characterized by unique developments, discoveries, and methodologies. These phases highlight the interplay between cultural, scientific, and technological advancements in shaping the field of medicine.

Scientific and technical progress and the emergence of modern technologies, as well as the discovery of new diagnostic methods and treatment of diseases, have enriched medicine so much that, as a result, modern medicine has emerged instead of the "healing art" that existed in it hundreds of years ago. However, if we look at the history of medicine, in ancient times, doctors tried to identify diseases in the early stages, to find their cause, and most importantly, to prevent the disease by taking preventive measures (donosology) and changing the way of life [1].

Doctors of ancient and ancient times attached great importance to psychosomatic dependence, mood and mental health to maintain physical health. Studying the history of the formation and development of medicine helps not only to expand the level of mastery, but also to connect the modern knowledge system with the ancient historical system, and in some sense, using the laws of dialectics, to look into the future [2].

Studying the history of medicine plays a key role in the cultural, aesthetic, ethical, and professional development of modern doctors. Medical art is not only passing information from generation to generation, but also joining the system of religious, philosophical, and national knowledge with the goal of perfecting humanity.

These phases highlight the interplay between cultural, scientific, and technological advancements in shaping the field of medicine:

1. Ancient and Prehistoric Medicine.

The earliest phase of medical history dates back to prehistoric times when health practices were rooted in superstition, rituals, and natural remedies.





STUDYING THE PROGRESS OF SCIENCE AND ITS SHORTCOMINGS



Prehistoric Healing Practices: Early humans relied on herbs, animal parts, and spiritual rituals to address ailments. Healing was often intertwined with religious and magical beliefs.

Ancient Civilizations: In civilizations such as Mesopotamia, Egypt, and India, medical knowledge began to formalize. For example, the Egyptians developed detailed medical texts like the Ebers Papyrus, while Indian Ayurveda laid the foundation for holistic medicine [3].

2. Classical Medicine.

This phase saw the rise of organized medical systems, particularly in Greek and Roman civilizations, which emphasized observation, philosophy, and ethics in medical practice.

Greek Contributions: Hippocrates, often called the "Father of Medicine," introduced the concept of natural causes for diseases and emphasized clinical observation. The Hippocratic Corpus became a cornerstone of Western medical tradition.

Roman Innovations: The Romans contributed significantly to public health infrastructure, including aqueducts, sanitation systems, and military medicine. Galen's works in anatomy and physiology influenced medical thought for centuries [4].

3. Medieval Medicine.

During the medieval period, medical knowledge in Europe stagnated under the influence of religious dogma, while significant advancements occurred in the Islamic world.

European Medicine: Medicine in Europe was dominated by the Church, and practices were often based on humoral theory and classical texts. Universities began to emerge, formalizing medical education.

Islamic Medicine: Scholars like Avicenna and Al-Razi made significant contributions, including the "Canon of Medicine," which synthesized Greek, Roman, and Indian medical knowledge and served as a standard text for centuries [5].

4. Renaissance and Early Modern Medicine.

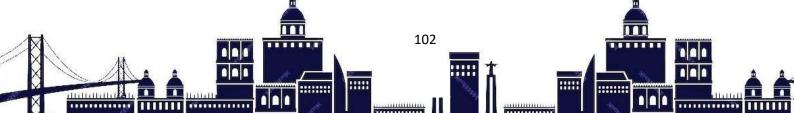
The Renaissance marked a revival of scientific inquiry and innovation, leading to a transformative period in medical history.

Anatomical Discoveries: Andreas Vesalius' work, "De Humani Corporis Fabrica," revolutionized the understanding of human anatomy through detailed dissections and illustrations.

Scientific Advancements: This era saw the invention of the printing press, facilitating the dissemination of medical knowledge. Paracelsus challenged traditional Galenic medicine, advocating for chemical treatments and toxicology [6].

5. The Enlightenment and Scientific Revolution.

This phase saw the application of scientific principles to medicine, emphasizing evidence-based practices and systematic experimentation.







STUDYING THE PROGRESS OF SCIENCE AND ITS SHORTCOMINGS



Development of Pathology: Giovanni Battista Morgagni laid the groundwork for modern pathology by correlating clinical symptoms with post-mortem findings.

Vaccination: Edward Jenner's development of the smallpox vaccine marked the beginning of immunology and preventive medicine.

Hospital Reform: Hospitals evolved from charitable institutions to centers of medical education and treatment [7].

6. Modern Medicine (19th and 20th Century).

The modern era witnessed groundbreaking advancements in medical science and technology, leading to the transformation of healthcare systems.

Germ Theory: Louis Pasteur and Robert Koch established the germ theory of disease, revolutionizing the understanding and treatment of infections.

Surgical Advances: The introduction of anesthesia and antiseptic techniques by pioneers like Joseph Lister significantly improved surgical outcomes.

Pharmaceutical Innovations: The discovery of antibiotics, vaccines, and synthetic drugs transformed the treatment of diseases.

Public Health: Modern epidemiology emerged with figures like John Snow, who identified cholera transmission through contaminated water.

7. Contemporary Medicine (21st Century)

The current phase is characterized by rapid advancements in technology, personalized medicine, and global health initiatives.

Digital Health: Technologies such as electronic health records, telemedicine, and wearable devices are transforming healthcare delivery.

Genomics and Precision Medicine: The sequencing of the human genome has paved the way for personalized treatment approaches targeting genetic factors of diseases [8].

Global Health Challenges: Modern medicine faces challenges such as pandemics, antibiotic resistance, and healthcare accessibility, emphasizing the need for international collaboration.

The evolution of medical history reflects humanity's enduring effort to improve health and well-being. Each phase of development has contributed unique insights and innovations, building the foundation for modern medicine. Understanding these phases not only honors the contributions of past civilizations and individuals but also inspires continued progress in the medical sciences.

Proponents of the religious-mystical theory put forward the idea that man came into existence, that he was healthy and healthy from the beginning, but due to his inaction, he suffered suffering, disease and death. The appearance of the first hospitals and medical schools is associated with the development of churches and mosques. Therefore, supporters of the materialist theory see medicine as a response to environmental influences. As Hippocrates wrote: "Life itself forced people to seek and discover the art of medicine." The improvement of medicine is mainly due to the increase of human knowledge, the development of science and technology.











REFERENCES:

- 1. Joy RJT. Morris LE, Schroeder ME, Warner ME. The history of the development of the history of medicine and its teaching in the United States.- Illinois: Wood Library-Museum of Anesthesiology, 2004. P.7.
- 2. Kushner HI, Leighton LS. Humanities in the Twenty-First Century. London: Palgrave Macmillan, 2013. -P. 111.
- 3. Barsu C. History of Medicine between tradition and modernism // Clujul Medical. 2017, № 90(2).doi: 10.15386/cjmed-794. P. 243.
- 4. Komilov N. Modern tendencies of teaching history of medicine in higher medical educational institutions and their analysis // Solution of social problems in management and economy. International scientific-online conference. Great Britain, 2023. pp.18–20.
- 5. Komilov N. Role of historical factors of history of medicines pedagogy / International scientific conference innovative trends in science, practice and education. №3, 2024. -P.95-98
- 6. Komilov N. Analysis of the main aspects of increasing the exclusive competence of students through teaching the history of medicine / Theoretical aspects in the formation of pedagogical sciences. №2, 2024. -P.18-20
- 7. Komilov N. Teaching history of medicine to foreign students is vital factor of pedagogy // World of Scientific news in Science. № 3/2. 2024. -P.51-55.
- 8. Komilov N. Didactic opportunities of teaching history of medicine to foreign students studying in higher medical educational institutions // Академические исследования в современной науке. Том 2, № 19.-С.119-122.

