



## THE DEVELOPMENT OF PHILOSOPHICAL THOUGHT: WESTERN PHILOSOPHY AND ITS INFLUENCE ON MEDICINE

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**Abstract** This article analyzes the influence of ancient Greek and Roman philosophical schools (including the Milesian and Eleatic schools, Pythagoras, Socrates, Plato, Aristotle, and Democritus) on medical science, the etiology of diseases, and medical ethics (deontology) based on the IMRAD structure. Through historical-logical analysis and comparative study, the conceptual connection between ancient philosophical ideas and modern medical concepts such as humoral theory, homeostasis, psychosomatics, biometry, and molecular pharmacology is revealed. In conclusion, it is scientifically substantiated that the study of ancient Western philosophy shapes comprehensive clinical and analytical thinking in medical practitioners, allowing them to approach the patient as a biopsychosocial entity.

**Keywords:** Philosophy of antiquity, history of medicine, medical deontology, humoral theory, homeostasis, psychosomatics, biopsychosocial approach, medical epistemology.

**Introduction** Ancient Greek and Roman philosophy (from the 7th century BC) is the cornerstone not only of universal human thought but also of fundamental medical science and practice. The philosophy of antiquity facilitated the transition from a mythical (mythological) worldview to a rational understanding of nature and humanity. It was during this period that medicine liberated itself from the influence of religion and magic, transforming into a field based on scientific observation and logic (exemplified by the Hippocratic school). The purpose of this analysis is to examine the formative stages of ancient Western philosophical schools (including the legacies of the Milesian and Eleatic schools, Pythagoras, Socrates, Plato, Aristotle, and Democritus) and to reveal their impact on modern medical science, etiology, anatomical gnoseology, and medical ethics (deontology).

**Methods** In this analysis, ancient philosophical doctrines were examined utilizing methods of historical-logical analysis, comparative study, and deduction. The ontological (concerning being), gnoseological (concerning knowledge), and axiological (concerning values and ethics) concepts of these philosophical schools were projected onto anatomical-physiological processes, clinical diagnostic methods, and bioethical principles in modern medicine.



**Results** The stages of philosophical development and their conceptual reflection in medicine consist of the following:

- **The Milesian School (The foundation of humoral theory in medicine):**

- **Thales** argued that water is the fundamental substance of being. *Medical correlation:* In modern science, the fact that the human body consists of an average of 60-70% water, and that homeostasis and metabolism occur in an aqueous medium, confirms the validity of Thales' concept.

- **Anaximenes** considered air to be the foundation. *Medical correlation:* The vital importance of the respiratory system (oxygenation) and the blood circulation process.

- **Anaximander** spoke of the "apeiron," which ensures the transition of substances from one state to another, and the conflict of opposites (heat-cold, dryness-moisture). *Medical correlation:* Hippocrates' doctrine of the "four humors" (blood, phlegm, yellow bile, black bile) is fundamentally based on this hot-cold, dry-moist balance. Disruption in the patient's body temperature and physiological balance was evaluated as the primary cause of disease.

- **Heraclitus and Dialectics (Homeostasis and Pathogenesis):**

- **Heraclitus** posited that the universe is in constant motion and driven by the struggle of opposites ("No man ever steps in the same river twice").

- *Medical correlation:* This is the philosophical expression of metabolic processes in the body (the conflict between anabolism and catabolism) as well as continuous cell renewal and apoptosis. Disease is perceived as a dialectical struggle between the body's defense mechanisms and pathogens.

- **Pythagoras (Medical biometry and dosing):**

- **Pythagoreans** placed numbers and order at the foundation of the universe, explaining phenomena through quantitative measures.

- *Medical correlation:* Modern medicine relies heavily on precise numerical data: body temperature indicators, heart rate, blood pressure (hemodynamics), laboratory test results, and the highly precise dosing of drugs in pharmacology are direct practical manifestations of the "philosophy of numbers."

- **The Eleatic School (Diagnostic epistemology):**

- **Xenophanes** discussed the limits of human knowledge, a concept further developed by Parmenides and Zeno.

- *Medical correlation:* Distinguishing between a patient's complaints (subjective signs - shadows) and the true cause of the disease (objective pathology - true being). The physician expands the boundaries of identifying hidden diseases through logical deduction.

- **Socrates and the Sophists (Medical Ethics and Deontology):**

- While the **Sophists** centered their focus on humans and society, **Socrates** directed philosophy toward ethics. He argued that societal peace depends on human morality.

- *Medical correlation:* Empathy toward the patient, maintaining medical confidentiality, and adherence to laws and societal regulations form the unwavering foundation of modern medical deontology and bioethics.

- **Plato (Foundations of Psychosomatics):**

- **Plato** developed the theory of the world of "Ideas and Shadows," positing that true reality exists in the realm of ideas.

- *Medical correlation:* The profound connection between the human psyche and the physical body. The root causes of numerous somatic (bodily) diseases are linked to disturbances in the nervous system and mental "ideas" (psychosomatics).

- **Aristotle (Anatomy, Physiology, and Teleology):**



- **Aristotle** classified the sciences and identified the four causes of all things in the universe (material, formal, efficient, and final).

- *Medical correlation:* Aristotle is considered the father of ancient anatomy and embryology. His analytical approach remains highly relevant in medicine: identifying the tissue of an organ (material), studying its structure (formal anatomy), understanding its evolutionary origin (efficient), and determining its function within the body (physiological final purpose).

- **Democritus (The foundation of Molecular Biology and Pharmacology):**

- **Democritus** formulated the doctrine that the universe consists of indivisible particles—atoms.

- *Medical correlation:* Cell theory, microbiology, genetics, and particularly molecular pharmacology serve as the scientific proof of Democritus's theory. The targeted action of drugs on specific receptors at the molecular level is the modern manifestation of ancient atomism. His assertion that "nothing happens by chance" indicates that the etiology of diseases inherently possesses a deterministic (cause-and-effect) nature.

**4. Discussion** The historical stages of ancient Greek and Roman philosophy demonstrate that medical science derived its fundamental principles from philosophical thought cultivated over centuries. Ontological inquiries, ranging from the Milesian school to Democritus, currently assist in comprehending the molecular, cellular, and humoral mechanisms of diseases.

Furthermore, the socio-ethical approaches of Socrates, Plato, and Aristotle serve as a theoretical framework for addressing issues within social medicine. This includes the physician's profound responsibility to the patient and the state's management of the healthcare system (Aristotle's concepts regarding the support of the middle class in his "Politics" align remarkably well with contemporary social medical insurance and healthy society models). In conclusion, the study of ancient Western philosophy fosters not merely a narrow clinical mindset in future and practicing physicians, but rather a comprehensive clinical and analytical intellect capable of perceiving the patient as a complete biopsychosocial entity.

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