INTERNATIONAL JOURNAL OF POLITICAL SCIENCES AND ECONOMICS
Impact Factor (research bib) - 9,78
https://ijmri.de/index.php/ijpse , German international journals company
ISSN 2751-9708

PHILOSOPHICAL ASPECTS OF THE HISTORY OF MEDICINE: THE EVOLUTION OF ONTOLOGICAL, EPISTEMOLOGICAL, AND ETHICAL PARADIGMS

Mamatqulova Nilufar Xusanovna
Teacher, Department of Social and Humanitarian Sciences
Tashkent State Medical University, Termez Branch
Email: nilufarmamatqulova@gmail.com
Qurbonova Mohinur Baxtiyorovna
"Lecturer at the Faculty of Law, Termiz State University"
mohinurqurbonova@gmail.com
Abdurasulov Pardabek Fayzulla o'g'li

1st year medical student
Tashkent State Medical University, Termez Branch
pardabek195@gmail.com
Uroqov G'anisher Suyun o'g'li

1st year medical student
Tashkent State Medical University, Termez Branch
ganisheruroqov787@gmail.com

Abstract This article analyzes the formation and development of the history of medicine from a philosophical (ontological, epistemological, and ethical) perspective, structured according to IMRAD requirements. It highlights the ontological evolution of the concepts of disease and health, ranging from animistic beliefs to humoral, tissue-cellular, and modern molecular-genetic levels. Within the epistemology of medical knowledge, the struggle between rationalism and empiricism is scientifically examined, alongside the shift in the physician-patient relationship from paternalism to autonomy. The article provides profound theoretical and methodological insights suitable for Higher Attestation Commission (HAC) standards.

Keywords: philosophy of medicine, medical ontology, epistemology, bioethics, holism, medical reductionism, paradigm, cellular pathology.

INTRODUCTION

Medicine and philosophy have developed in close interconnection since the dawn of human civilization. As ancient Greek thinkers emphasized, "The philosopher becomes a physician, and the physician resembles a philosopher" (Hippocrates). Medicine is not merely a practical craft or an empirical science; it is a complex system that investigates the very essence of human life, death, health, suffering, and existence.

Although modern medicine has achieved unprecedented technological breakthroughs, it is currently experiencing profound philosophical and methodological crises. Narrow specialization and a technocratic approach have led to viewing the patient not as a holistic individual, but as a collection of isolated organs and systems (mechanism). Therefore, casting a philosophical gaze upon the history of medicine allows for a reconceptualization of the nature of health and disease (ontology), the methods of medical cognition (epistemology), and the physician's duty (ethics).

The **purpose** of this study is to analyze the laws governing the paradigm shifts that emerged during different periods in the history of medicine and to reveal their impact on modern clinical reasoning.

METHODS

In preparing this scientific article, leading international and domestic literature on the history and philosophy of medicine (including works by T. Kuhn, M. Foucault, H. Hartmann,

and Avicenna) underwent systematic analysis. The study utilized the following scientific and philosophical methods:

1. **Historical-logical method:** The evolution of medical knowledge across different eras was studied based on continuous and leap-like (paradigm shift) regularities.
2. **Epistemological analysis:** The ratio between the methods of achieving truth in medicine—empiricism (observation and experience) and rationalism (logical deduction)—was evaluated.
3. **Comparative-typological method:** Approaches of medical holism and reductionism across different civilizations (Antiquity, the Islamic East, the European Renaissance, and the Modern Era) were compared.
4. **Systemic approach:** The biopsychosocial model, which views the organism as an integrated unity of biological, psychological, and social factors, was subjected to analysis.

RESULTS

A philosophical analysis of medical history demonstrates that, over centuries, medical reasoning has evolved along three primary philosophical axes: ontological (what is the nature of the disease?), epistemological (how can the disease be known?), and ethical (what should the relationship between doctor and patient be?).

3.1. The Shift in Disease Ontology: From Mythology to Tissue Biology

The understanding of the nature of disease (ontology) has progressively changed:

- **Magic and the Animistic Paradigm:** In primitive communal societies, disease was considered the entry of evil spirits into the body or a punishment from the gods. Healing methods were primarily of a mystical-religious nature.
- **Natural Philosophical and Humoral Paradigm (Antiquity):** Hippocrates and Galen separated medicine from religion and linked it to natural science (natural philosophy). According to them, health was the balance of four bodily fluids (blood, yellow bile, black bile, phlegm)—*eucrasia*, while disease was the disruption of this balance—*dyscrasia*. This marked the first time disease was viewed as a *material-natural* phenomenon.
- **Iatrophysics and Iatrochemistry (17th-18th Centuries):** Influenced by the mechanistic philosophy of R. Descartes and F. Bacon, the human body began to be viewed as a complex "mechanism" or chemical laboratory. W. Harvey's discovery of blood circulation explained the organism as a hydraulic system (iatrophysics).
- **The Tissue and Cellular Revolution (19th Century):** The greatest turning point in medical ontology occurred as a result of microscopic analysis. M. Bichat proved that diseases occur not only in general organs but within the *tissues* (at the histological level) that constitute them. Subsequently, R. Virchow's "Cellular Pathology" demonstrated that disease is not a pathology of the entire organism, but of specifically damaged cells. These discoveries transformed anatomy, histology, and pathology into the objective and undeniable foundational basis of modern medicine.

3.2. The Evolution of Medical Epistemology: From Empiricism to Evidence-Based Medicine

The philosophy of knowing the truth of a disease (diagnostics) also evolved: During the Eastern Renaissance, Abu Ali ibn Sina (Avicenna) created a perfect epistemological system of medical knowledge in his "Canon of Medicine." He combined Aristotelian logic with practical observation, introducing the methods of induction and deduction into medicine. In the Modern Era, scientists like T. Sydenham and G. Morgagni abandoned speculative rationalism and founded clinical empiricism by comparing strict clinical observations with pathomorphological changes. Today, this process has taken the form of "Evidence-Based Medicine," meaning personal experience has been replaced by multicenter, randomized statistical and histological studies.

3.3. Paradigms of Medical Ethics and Bioethics

The philosophical character of the doctor-patient relationship encompasses three eras:

1. **Paternalism:** A model that lasted from the time of Hippocrates until the 20th century. The doctor was viewed as the "father," and the patient as the "child." The physician took full responsibility for all decisions, often without considering the patient's preferences.

2. **Human Rights and Autonomy (Mid-20th Century):** Following the Nuremberg Code and the Declaration of Helsinki, the approach to the patient as an individual shifted. The patient was no longer a passive recipient but an equal subject in the medical process (the principle of informed consent).

3. **Biotechnological Ethics (21st Century):** Processes such as IVF (in vitro fertilization), cloning, euthanasia, genetic engineering, and organ transplantation have introduced new philosophical and ethical dilemmas to humanity—bioethics. The question of where the boundary lies in exercising authority over the human body remains open.

DISCUSSION

The historical and philosophical findings indicate that modern medicine is increasingly distancing itself from its methodological roots, becoming a victim of intense *reductionism*.

While discoveries at the tissue and cellular levels in the 19th century freed medicine from supernatural dogmas and elevated it to the ranks of exact sciences (a true scientific revolution), today's hyper-narrow molecular and genetic approaches also generate distinct negative consequences. The modern physician often treats the patient's printed lab results and radiological/histological reports, forgetting their psyche, lifestyle, and social environment (the holistic picture).

Philosopher Michel Foucault, in his work "The Birth of the Clinic," terms this phenomenon the "authoritarianism of the medical gaze." Foucault asserts that the modern clinic began to view the patient not as a subject (a human being) but as an object (a locus of disease). The patient's narrative (anamnesis) has been replaced by the metrics of laboratory apparatuses.

To resolve this epistemological problem, the **Biopsychosocial model** was proposed by G. Engel in the late 20th century. This concept represents a new philosophical paradigm in medical history, proposing that disease is not merely a biological dysfunction of organs or tissues, but a complex process accompanied by human psychological suffering and social maladjustment. Just as it is vital to maintain micro-level precision based on the achievements of histology, biochemistry, and microbiology, it is equally necessary to restore the macro-level psychosocial approach that views the human as an integrated system.

Furthermore, the integration of artificial intelligence and neural networks into diagnostics (including the analysis of tissue samples) is creating a new wave of ethical (bioethical) crises. Allowing machines to have a decisive vote in the diagnostic process demands a philosophical analysis regarding the preservation of the physician's clinical intuition, empathy, and human responsibility.

CONCLUSION

A philosophical analysis of medical history demonstrates that medical reasoning is not merely a collection of technological and empirical facts, but an ongoing process of alternating epistemological and ontological paradigms aimed at understanding the human being.

1. Disease ontology began with a humoral nature and narrowed down to the anatomical, then tissue-cellular, and finally molecular levels. This process has been immensely beneficial in discovering the root causes of diseases but has weakened the holistic approach to the patient.

2. Medical cognition (epistemology) transitioned from purely speculative-logical reasoning to an era based on strict evidence and instrumental statistics. While this has reduced diagnostic errors, it has diminished creativity and individualized approaches in clinical thinking.

3. Ethically, medicine has evolved from paternalism, where the physician held absolute authority, to the stage of bioethical autonomy, which respects human dignity and the right to make decisions.

The philosophical task of future medicine is to find the golden mean between strict biological reductionism (becoming an exact science at the cellular and molecular levels) and humanistic holism (loving and understanding the patient as a psychosocial being).

REFERENCES

1. **Avicenna (Ibn Sina).** *The Canon of Medicine.* Vol. 1. Tashkent: Fan, 2021.
2. **Foucault, M.** *The Birth of the Clinic: An Archaeology of Medical Perception.* Routledge, 2020.
3. **Kuhn, T. S.** *The Structure of Scientific Revolutions.* University of Chicago Press.
4. **Engel, G. L.** "The need for a new medical model: a challenge for biomedicine." *Science*, 196(4286), pp. 129-136.
5. **Virchow, R.** *Cellular Pathology as Based upon Physiological and Pathological Histology.* London: John Churchill.
6. **Pellegrino, E. D., & Thomasma, D. C.** *A Philosophical Basis of Medical Practice: Toward a Philosophy and Ethic of the Healing Professions.* Oxford University Press.
7. **Beauchamp, T. L., & Childress, J. F.** *Principles of Biomedical Ethics.* Oxford University Press, 2021.
8. **Khrustalyov, Y. M.** *Philosophy of Medicine and Healthcare.* Moscow, 2022.
9. Turdimuratov, B.K. (2022). *Teaching Medical Sciences Using Innovative Methods and ICT*. Tashkent: Uzbekistan Medical Publishing House.
10. Kurbonovich, T.B., & Bahodirovich, B.B. (2026). Step-by-step acquisition of practical skills in studying information technologies in medicine. *Global Science Review*, 17(1), 203–209.
11. Kurbonovich, T.B., & Nurhayat, M. (2026). Compilation and steps of the medical situational issues algorithm. *American Journal of Applied Medical Science*, 4(2), 59–63.
12. Turdimurodov, B.K., et al. The essence of electronic textbooks in medical education. *European Journal of Humanities and Educational Advancements*, 3(4), 48–50.