

# History of Medicine As an Academic Discipline: Current Problems and Approaches to Teaching

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**Abstract**—This article focuses on the place and significance of the history of medicine in the system of higher medical education and the formation of the professional competence of doctors. The author identifies current approaches to the teaching of the history of medicine that aid the fullest development of students' professional thinking and development of their personal qualities.

**Keywords**—*history of medicine, history of science, medical education, competence approach, professional thinking of a doctor*

## I. INTRODUCTION

The history of medicine since its appearance as a subject of scientific research and academic discipline was designed, on the one hand, to record the process of increasing medical knowledge, and on the other, was part of the professional development of doctors, performed its educational and didactic functions. In recent decades, the importance of the history of medicine as an academic discipline and the need for its presence in the curriculum have been questioned [1]. The onset of the era of “scientific medicine” in the second half of the XIX century - the beginning of the 20th century contributed to the transition of the history of medicine from the field of medical knowledge itself to the area of historical knowledge [2]. This article attempts to consider the history of medicine as a sociocultural phenomenon in the context of professional and general history of science. The analysis of the conceptual and terminological apparatus, with clarification of the content and scope of key concepts is set. The place and significance of the history of medicine in the system of higher medical education has been determined from modern methodological positions.

## II. METHOD

The study used the methods of cultural-historical analysis to construct the subject of study, logical-semantic analysis were applied to determination specifically the historical content of the concepts “history” and “propaedeutics” and using methods of comparative studies have helped to identify constitutive differences between the history of medicine as a science and as propaedeutic discipline.

## III. RESULTS

Logical-semantic analysis of the concepts of “history”

and “propaedeutic” has been carried out. The essence of propaedeutic as a didactic condition ensuring the integrity of the educational process is revealed. The conclusion is made about the one-sided ideas about the propaedeutic nature of the history of medicine, which does not allow to realizing the research, educational, world outlook potential of the history of medicine as an academic discipline and subject of scientific research.

## IV. DISCUSSION

Today, the history of medicine as an academic discipline has to resolve quite complex organizational and methodological tasks. On the one hand, its educational and educational potential is closely associated with improving the general and professional training of future doctors, their medical culture, their own medical experience, the formation of the special moral qualities of a medical worker [3]. On the other hand, the history of medicine is increasingly linked to the history of the development of individual medical specialties, in relation to which it seems to be a kind of propaedeutic course — a preparatory discipline that allows one to proceed to a deeper understanding of the clinical specialty in the relevant department [4,5]. In this case, the tasks of the history of medicine are “the functions of systematization, facilitation and motivation of the subsequent mastering of the foundations of medicine.”[5]

Of course, the historical and medical heritage is the basis on which the subsequent education and development of the doctor is built. For a physician, along with knowledge of the theoretical foundations of anatomy, physiology, biology, law, the genesis of medical knowledge itself in various contexts is very important: knowledge of the epistemological and value-normative foundations of medicine, its traditions, rules and ideals that form internal attitudes, character, and beliefs modern doctor [6]. But can we talk about the propaedeutic character of historical and medical knowledge?

Let us briefly consider what “propaedeutics” is and what the meaning of modern science in the concept of “history” is.

Let's start with the etymology. Propaedeutics (in Greek Προπαιδεύω (propaideio) - teaching in advance) - an abbreviated presentation of any science in a systematic way,

i.e. preparatory, introductory course in any science preceding a deeper and detailed study of the relevant discipline. The origin of the word clearly refers to the process of learning. If you pay attention not to the pro prefix - a preliminary, pre-learning, but to the root of the word - *paideia* and the meaning attached by ancient Greeks them to this concept (*país* – a baby in Greek), first of all is the upbringing and education of children, then general education: harmonious, physical and spiritual formation of a person, to achieve all his abilities and possibilities [9], then *propaedeutics* turns into a methodological principle of harmonious upbringing and education of a child. The identification of *propaedeutic* courses with the means of “laying out” the style of thinking, a certain logic, is typical of philosophical *propaedeutics*. Medical *propaedeutics* sees its purpose in the introduction to the profession, in the education of professional personality traits of a doctor, in teaching methods of clinical examination of the patient, semiotics of diseases, anticipating independent student clinical practice. *Propaedeutics* as a pedagogical phenomenon deals with the availability and systematization of knowledge based on the development and continuity of concepts, the sequence of their construction and presentation, and their connection with practice. Thus, *propaedeutics* involves a certain way of organizing the educational process, but it is also a broader concept of didactics. “*Propaedeutics* is a preliminary study or repetition, synthesis and systematization of previously studied knowledge at the methodological level in order to establish successive links, as well as complicate the types of learning and cognitive activity in terms of student-centered learning. The above allows us to define *propedeutics* as a didactic condition to ensure the continuity of education based on the principles of continuity and personalization.” [10] But is it possible to present a *propaedeutic* discipline such fundamental science as history, the main purpose of which is to establish the laws of the development of human society, the principles of its organization and evolution? Turn again to the conceptual apparatus.

According to the point of view in linguistics, the Russian word “*istoriya*” (“*history*”) comes from “the Indo-European root *vid*, the meaning of which appears in Latin. “*Video*” and Russian word “*videt*”, which means “*see*”. As can be seen from the Greek words “*know*”, formed from the same root, the words with this root denote not just visual perception, but also cognitive processes, which is also easy to notice in Russian “*to know*” and in German “*wissen*”, which are already definitively related to the sphere of thought.” [11] In a broad sense, the concept of “*history*” is used to characterize the origin, formation, transformation of any things, phenomena, systems, areas of knowledge, flow and transformation of any processes [7]. At the same time, the peculiarity of “*history*” as a method of exploring the surrounding world is the “*reverse*” course of interpretation of historical processes, the opposite of the course of reproduction of historical events. “The study of history as a process includes the concepts of causality, consequences, contradictions, chance, possibilities, with the help of which

the systematization or structuring of social, economic, political, mental life is carried out. These are the basic concepts of historical science, with the help of which the reconstruction of historical reality takes place.” [7] From this point of view, historical science does not fit into the framework of an elementary, preparatory, introductory, *propaedeutic* course, preceding an in-depth study of another discipline, if this discipline is not history. In this case, “*natural history*” can serve as a *propaedeutic* base for “*history of medicine*”, “*history of medicine*” for “*history of science*”, and vice versa.

The history of medicine is a science exploring the dynamics of the formation and development of medical knowledge. A variety of ideas about the history of medicine can be roughly divided into two main types: the first treats it as a tangible heritage of previous generations. In this case, the task of the history of medicine is the preservation, study, description and analysis of materialized sources of medical knowledge: ancient medical treatises, collections of recipes, books, medical instruments, etc. On the other side the history of medicine is a field of knowledge that studies the process of the development of medical science unfolding in time. This interpretation of the history of medicine involves the analysis of the development of medical knowledge through the study of the activities of people involved in the process of their creation, preservation and transmission. In this case, the history of medicine appears as living, i.e. active, saturated with the strength and abilities of doctors and patients, the connection of past, present and future. Obviously, a look at the history of medicine through the lens of social relations turns out to be broader than the problem of the interaction of researchers with medical artifacts. In the second case, there is a need to see beyond the significant objects of medicine the schemes of activity and communication of representatives of the medical community, to simulate situations of the emergence and reproduction of these schemes. Both types of ideas about the history of medicine, in fact, contain the distinction of history as: a) describing the dynamics of the development of medical knowledge and b) as knowledge - reconstruction, interpretation, explanation of this knowledge as an indispensable factor in the formation of clinical thinking.

The essence of the history of medicine as a science consists precisely in the identification of patterns of social development, which are built on the theoretical understanding and generalization of historical facts and processes. The shift of emphasis from the description to the analysis of the formation and development of historical and medical knowledge and its operational procedures provides an opportunity to reconstruct the process of the development of medicine as a science and bring the result of the work to the level of understanding correlations, for example, between one method or another and modern medical reality [8]. The complex nature of the formulation of scientific problems, a systematic look at the issues of etiology and pathogenesis, a holistic look at the patient formed in the process of studying the history of medicine contribute to the formation of skills of analytical work,

identifying epistemological reserves for future scientific discoveries. According to the capacious wording of the American historian David Levine, “The study of history requires us to create chronologies and structures out of a myriad of events. Clearly, we bring our concerns and questions with us and so we find coherent patterns that make the social process intelligible to us. But these chronologies and structures are of our making, so they are bound to differ in important ways from the chronologies and structures understood by men and women in past times. This contradiction creates the problematic of social history. That is, how can we acknowledge the process of social change while, at one and the same time, comprehending the structures and chronologies that were experienced by men and women in past times. In essence, then, the problematic becomes similar to that propounded by Max Planck and Werner von Heisenberg when they tried to come to terms with their newly acquired understanding of the physical world, in which general theories were inadequate guides to explaining sub-atomic behavior.” [12] This kind of research cannot be carried out without in-depth knowledge of the laws and laws of the subject being studied, and therefore cannot rely on propaedeutic attitudes.

#### V. CONCLUSION

Modern approaches to medical education impose on the Russian higher education a number of new requirements. In solving the general problem of medicine - the prevention and treatment of human diseases - medical science requires future physicians to understand the laws of scientific knowledge, master the general theoretical and practical fundamentals of scientific research methodology, which are formed, including as part of the study of the history of medicine. Identification of the specifics of the formation and development of medical knowledge through the study of doctrines of the past and present, the study of the culture of thinking of doctors of different eras, assessing the impact of social conditions on the development of knowledge about

human health and diseases, make up the vector of cognitive activity of future researchers and determine the essence of the development of the history of medicine as an academic subject and its place in the modern educational process.

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