

P.I. SHATILOV AS A PUBLIC ACTOR, SCIENTIST, FIGHTER WITH EPIDEMIC DISEASES: TO THE CENTENARY OF DEATH

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Abstract

Prerequisites. The relevance of the study is caused by the fact that the personality of P. Shatilov does not have a sufficient scientific reflection in the literature from the standpoint and with the use of methods of studying medical local lore. In particular, historical research methods are neglected, however, they can be used to study the work of P. Shatilov in Kharkov in more detail during the epidemics that engulfed the city in 1919–1921. Today, when the whole world suffers from coronavirus infection, it is extremely important to give an example of medical struggle in emergencies, the victories of P. Shatilov not only as a physician but also as a citizen, because such examples instill responsibility to society. **Task** was to provide an updated biographical study of P. Shatilov for the centenary of his death, taking into account the methods of historical research, which had not previously been used in works of this kind. After all, medical personnel require a wider use of methods than previously represented biographical studies on the figure of P. Shatilov. To reproduce the biography of a scientist on a historical background, highlighting not only personal data, but also depicting the era in which the scientist lived and worked. **Materials and methods.** The results of similar studies have indicated that it is necessary to rely on conceptually important general scientific epistemological principles: historicism, objectivity, a combination of both logic and historicity, systematicity. The same methods were used in this study. The methodological basis of this type of research is a specific group of approaches and methods that are used for systematic analysis of the general historical process and medical personalia as an integral part of historical and medical knowledge. The biographical approach, thanks to which the historical reality is considered in time and space, widely covers the problem in a large historical context is a leading one. Phenomenological and paradigmatic approaches provide the necessary scientific tools to reproduce the atmosphere of the time period, reconstruct the preconditions for the formation of worldviews of P. Shatilov, clarify the sources of influence on personality development, the formation of views and beliefs of the scientist, generalization of views and beliefs and his impact on the development of medical science. The high share of this innovative and traditional form of research is provided upon the condition of following the principle of historicism, objectivity of coverage of facts, adequacy in the use of all sources of information, as well as avoiding idealization of the provisions and ideas of the past, giving them a dogmatic status. **Results.** As a result of a comprehensive study, a medical personalia of P. Shatilov was created, which is based on the application of a comprehensive methodological approach. This is what distinguishes this study from previously created ones and provides an example to researchers for studying topics related to personalities. **Conclusions.** P. Shatilov's work in Kharkiv in recent years has been marked by difficulties in combating the plagues that have engulfed the city. However, the scientist tried to introduce a systematic action to combat plagues, based on the principles of contemporary scientific knowledge.

Keywords: *"All-Russian League for the Fight against Tuberculosis", typhus, epidemics, P. Shatilov, tuberculosis, Kharkiv, cholera.*

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The life, activity and scientific achievements of Petr Ivanovich Shatilov were briefly covered in several purely medical publications [1; 2]. This is usually a reference to his name or general biographical information. There are also annoying mistakes in reputable publications, which are full of unsubstantiated and ill-considered approach to the study of the topic. Thus, in the "Crimean Therapeutic Journal" for 2010 in the second issue of the second volume there is an article stating that "P.I. Shatilov's student was a graduate of the Medical Faculty of Kiev University of St. Vladimir – Fedor Mechislavovich Openhovsky" [3]. Such conclusions should be made too carefully, because it is known that the scientific career of P. Shatilov began with the invitation of F. Openhovsky to work in the clinic. At that time, F. Openhovsky already had some experience and his own baggage of research. In addition, in 1913, when P. Shatilov had just returned from Paris, prof. Openhovsky was already elected as a chairman of the therapeutic section of the Kharkiv Medical Society, he developed as an outstanding doctor, teacher, scientist (1884 – defense of a doctoral dissertation), and in 1914 after the death of F. Openhovsky, it was P. Shatilov who delivered a speech on behalf of Fedor Mechislavovich's students [4]. Therefore, such a mistake is unacceptable, because when talking about the scientific school, the succession of generations, you cannot carelessly treat such facts, because the article written in a leading therapeutic journal will be quoted by descendants and will make the wrong impression, and then such errors will "travel" from one edition to another. And here we clearly see a narrow approach to the study of the personality, because a true historian always checks the factual material, involves several sources, compares, is critical of certain theses, and when being in doubt – always checks the information. Unfortunately, the study of medical personnel by medical researchers is not marked by such thorough approaches, so the scientific community receives such annoying mistakes. By the way, in the mentioned article, the date of F. Openhovsky's birth is also confused – he "rejuvenated" for three years, the year 1856 is indicated instead of the required 1853. What is this – negligence, a typographical error? And is such case the only one?

It should be noted that the personality of a scientist is not subject to comprehensive study, because from the standpoint of medical local lore, the personality should be considered taking into account historical time, realities, social and

economic, political events that influenced a person's life, formed his worldview. Fragmentary research, simple mentions between the lines, low-quality studies cannot fully reproduce the personalia of a healthcare professional, as can be done using the methods of general scientific and specific historical knowledge. Neglecting historical research methods impoverishes the individual, does not make it exhaustive and turns it into purely reference information. Giving life, major milestones, scientific achievements – this is a typical cliché of such works.

However, the contribution of those who developed P. Shatilov's personalia should not be underestimated, because it is still a means of popularizing the personality not only in medical circles, but also a representation for the general public of Kharkiv. An interesting experience in this regard is Max Rosenfeld's video from the series "History of Medicine in Faces", where Max Rosenfeld publishes information about Kharkiv doctors on the network channel [5]. However, such videos only draw attention to the personal, but do not provide the comprehensive information about the formation of views, the historical time when a person lived, his public position.

The aim of the work is to create a medical personalia of P. Shatilov using complex methods of scientific research. This will allow to qualitatively reproduce his life and work, to analyze the achievements in medical science of that time.

P. Shatilov is a bright representative of Kharkiv therapists who created his own scientific school. He was born in 1869 in the Kursk province and began his studies at the Voronezh Gymnasium, after which he continued his education in the city of Kutaisi, and in 1890, he entered the medical faculty of the Imperial Kharkiv University. In 1895, Petr Shatilov graduated from high school with the title of "doctor with distinction" [6]. Even then, he took an active public position, because, not yet having a medical degree, he actively helped to overcome cholera in the Cossack settlement, which began there in 1892.

After studying, the curious student Petr Shatilov at the invitation of F.M. Openhovsky remained a full-time resident of the therapeutic clinic, then he was transferred to the position of assistant, and in 1902 the young scientist defended his doctoral dissertation "On the doctrine of the forms of pulse curves" [7]. He went up the corporate ladder quickly: in 1904 he was a private associate professor, reading the subject "Clinical Research Methods", and in 1910 he was a professor at the Department of Internal Medicine

Diagnostics. From 1906 to 1908, Shatilov was in Europe, where he worked in the physiological and pathological laboratory of Paris, studied metabolic processes, became acquainted with current research on immunity, bacteriological innovations, mastered new diagnostic methods, visited Bern, Zurich, Berlin for scientific purposes.

Returning to his homeland, P. Shatilov became actively involved in the fight against tuberculosis and in 1911 became one of the organizers of the "All-Russian League for the Fight against Tuberculosis" [6, p. 422]. The problem of tuberculosis throughout Ukraine has arisen on a huge scale. At the same time, the Kharkiv province was noted as a pioneer – statistics showed that in the early twentieth century, 63% of patients were from this province [8, p. 141]. This is not surprising, because Kharkiv was actively developing at that time, the development of the city as an industrial center attracted people from different parts of the country in search of work, so the city suffered from overcrowding, poor hygiene, terrible sanitation, saying nothing about epidemic prosperity. Mostly tuberculosis was diagnosed among workers and peasants, exhausted by hard physical labor, deprived of normal living conditions, suffering from chronic malnutrition. Data were disappointing in other provinces as well, where the incidence rate was rising. Therefore, P. Shatilov immediately understood – the situation requires a systematic, balanced approach and the creation of a single coordinating center in the fight against tuberculosis. Thus, after Russia's accession to the International League against Tuberculosis in 1909, the scientist decided to promote the establishment of the corresponding center in Ukraine, which began operating on May 18, 1918 in Kharkov and eight more centers were opened in other cities of Ukraine. Shatilov helped to attract public funds, because there was a lack of state funding – the League created outpatient clinics, anti-tuberculosis sanatoriums, conducted sanitary and educational work. In particular, on December 6, 1912, at the initiative of the League, a free outpatient clinic with its own X-ray room was opened in Kharkiv on Sq. Voznesenskaya, 12 (now – Feuerbach) for patients with tuberculosis [9].

P. Shatilov began to form his own scientific school, introduced his students to new research. However, the imperial authorities, having started repressions against the professor, interfered with the normal work of the professor and due to the pressure of the Minister of Education Lev Kasso, Shatilov was forced to leave the city for a while.

He was the first in the Russian Empire in 1912 to introduce successful typhoid vaccinations, and for this, he was blamed by the incompetent leadership, because he did not have official permission to use the vaccine.

The scientist returned here after a brilliant speech at the international congress in Paris, where the results of his research were recognized by the world's leading physicians. In his first report, he introduced the scientific community to the typhoid vaccine, talked about anaphylactic shock, general and local reactions of the body to the vaccine, the minimum effective dose and so on. In the second report, P. Shatilov spoke about the individual approach to the patient during the diagnosis and treatment of diseases.

Shatilov returned to Kharkiv as a world-renowned scientist, so, in January, 1913, he headed the therapeutic clinic of the Kharkiv Imperial University [10]. In 1914, Petr Shatilov became the head of the faculty therapeutic clinic of the Women's Medical Institute.

In 1918 P. Shatilov was elected as a professor of the department of faculty therapy of the medical faculty of IHU. Already at that time, he revived the work, holding this position until his death. Within three years, the department began to develop issues of tuberculosis, pneumonia, cardiovascular system, epidemiology and immunology of typhus. P. Shatilov was demanding of staff and students, however, they loved the professor. It is known that some of the students who had problems with housing were settled by Shatilov in his country house until they found a room [11].

The change of authority in the city was perceived positively by P. Shatilov, as he was first and foremost a doctor and performed his public duty. Therefore, in 1918 he and M. Melnikov-Razvedenkov participated in the creation of the journal "Medical Affairs", which was to become and became a mouthpiece of the medical science of those times, because "Kharkiv Medical Journal" in 1917 ceased to exist and the medical community was left without a leading professional publication [12]. The first issue was published on December 1, 1918, where Petr Shatilov first edited the department of internal medicine in the journal, and then became the editor-in-chief of the publication.

Topical articles of doctors from different parts of the country were published here, reviews of the works of foreign scientists were conducted, and own analytical articles were published, which were absolutely necessary, as medical science

began to develop rapidly, requiring not only practical experience but also scientific basis.

Unfortunately, Shatilov's life ended prematurely. Examining patients with typhus in prison, he fell ill on May 2, 1921, and on the 13th of the same month he passed away, leaving behind a scientific legacy and, most importantly, a powerful scientific therapeutic school.

During the years of activity P. Shatilov published 8 works on bacteriology and 31 more works on various fields of medical knowledge – on pathological anatomy, hematology, radiology, anthropology, chemistry and pharmacology, but his researches on clinic and diagnostics of internal diseases are especially significant. The study of cardiac activity today is impossible to imagine without percussion and auscultation, the principles of which were formed by P. Shatilov, who also studied the pulse, heart rhythms, pathological noises in the heart. For his students, P. Shatilov formed the most important thesis – any doctor who can think clinically will be able to make even the most difficult diagnosis.

However, Shatilov's research on the treatment of infectious diseases also seems interesting. It is interesting that even here, in science, P. Shatilov put social needs above his own. When the vaccination of the Turkish doctor Gamdi failed, in 1920 P. Shatilov and S. Kotsevalov were the first to get preventive vaccinations against typhus and set an example for their closest students to do the same [2; 13].

It is interesting that the scientist thoroughly approached the study of the causative agents of epidemics raging in the city. Depending on the obtained data, the doctor built a scheme of treatment of patients and first of all emphasized the importance of prevention. It should be mentioned that at that time the concept of systemic prevention as such was not widespread, so Shatilov can be considered a pioneer among domestic doctors. His ideas about vaccination were bold, but not unfounded.

However, another thing is interesting as well: his approach to the study. In 1919, in the journal "Medical Practice" (Vrachebnoe Delo), P. Shatilov published an article in which he carefully studied the influenza virus, epidemics of which had raged in recent years, and in 1889-1892 influenza was recognized as a pandemic. Petr Shatilov analyzed the opinions of leading European scientists on the causative agent of influenza and analyzed the symptoms of the disease, as well as pointed out the complications that arise against the background of influenza. P.I. Shatilov studied the course of

the disease and covered its influence on the body's systems – respiratory, digestive, nervous, circulatory, and other ones – in detail.

However, the doctor concluded that the virulence of the pathogen may have changed, the human body may have changed, but a significant factor that leads to the disease is a decrease in immunity. He claimed that the reasons for this decrease were namely social problems – malnutrition, nervous tension, difficult living conditions and "appalling conditions of modern existence" [14]. Petr Shatilov delivered a report on the flu epidemic in his speech on October 26, 1918, at a meeting of the Kharkiv Medical Society, which was attended by 175 members of the society and 350 invited guests [15].

The fight against the plagues arose in 1919–1921 at the national level, because doctors were constantly trying to extinguish the "continuous outbreaks of epidemics", but all in vain [16]. Not only typhus but also cholera raged. Kharkiv Provincial Executive Committee appropriated a lot of funds for anti-epidemic measures and streamlining the sanitary condition of the city, but this was not enough to overcome the disease [17]. The Kharkiv medical community did not stay away – in the sections of the Kharkiv Medical Society, P. Shatilov repeatedly made a report on typhus and emphasized the fight against it [15]. At the initiative of the governing bodies of health care in the city under the People's Commissariat of Health of the USSR in 1920 a state commission for the study of typhus was established, headed by Petr Shatilov [18, p. 108; 19, p. 98.].

Petr Shatilov's activity in the medical field is a complete sacrifice to medical science. The scientist even donated his remains to scientific institutions. His activity was fruitful, and the scientific therapeutic school was successful. P. Shatilov's students worked in many cities of Ukraine, spreading and improving the knowledge of their teacher.

Shatilov's position today should become exemplary, because he was first and foremost a socially-oriented person – he did not refuse to help the sick people, he supported students, tested a typhoid serum on himself, worried about the fight against plagues, neglecting his own safety. Such devotion is impressive and should be an example for today's doctors, students, all those who are involved in the medical field. The medical personalia proves that all the doctor's actions were primarily closely related to the social background. He saw the main threat in

the low quality of life, so in his research he emphasized this, and in practice, he involved the public, conducted educational work. His contribution to medical science is invaluable, and the name of Shatilivka, where the doctor's country house was located, was forever engraved as a toponym.

The medical personalia dedicated to P. Shatilov does not claim to be exhaustive. However, factual inaccuracies and significant conceptual errors have been corrected here. Studying with the involvement of specific historical research methods made it possible to depict the life and work of P. Shatilov against the background of the history of Kharkiv, to which he gave his whole life. The actions of P.I. Shatilov is a reaction to the challenges of time, which makes it possible to assert the active public position of the scientist.

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This is another example of the fact that the physician's personality cannot be studied encyclopedically, it is necessary to approach this with a broader methodological toolkit in order to obtain a result from a new angle.

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Consent for publication

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