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# Formation of hygiene and institutionalization of its teaching as an independent discipline of higher medical school in Russia

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## Abstract

The introduction of the new University Charter and the era of large-scale reforms in the middle of the XIX century, the emergence of experimental methods of research, and at the same time, the remaining urgent issues of the spread of epidemic diseases made the opening of departments of hygiene acutely necessary. The process of formation and subsequent institutionalization of hygiene teaching as a discipline has not previously been comprehensively covered by researchers in Russian historiography. The possibility of identifying a number of unresolved systemically important tasks allowing to synthesize the main directions of the scientific study of the process of hygiene development in the historical and medical knowledge from an institutional perspective was realized in this article. The history of the organization of hygiene departments in Russia is the subject of many studies. And the publications of general historical medical monographs and textbooks often contain contradictory information that does not reflect some important details and peculiarities of the formation of the traditions of teaching this discipline, which were established in the second half of the XIX century. The result of the study was clarification of data on medical workers who became the first hygiene educators in Russia. It was determined that the regular teaching of hygiene as a separate discipline began in the second semester of the 1864–1865 academic year at the medical faculty of the Imperial Kazan University. The first teacher of hygiene in Russia was Professor of Kazan University Arkady Ivanovich Yakobii. It was also clarified that regular hygiene teaching at the Saint Petersburg Imperial Medico-Surgical Academy was established in November 1865. Ivan Maksimovich Sorokin was the first hygiene teacher at the Academy and the first head of the hygiene department. Alexey Petrovich Dobroslavin, who was previously considered the first head of the hygiene department, actually became the second head of the corresponding department, starting teaching only in 1872.

Keywords: general hygiene, history of creation, preventive medicine.

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The history of teaching hygiene in higher educational institutions in Russia dates back more than a century and a half. The imperial institutions of higher education, starting from the second third of the XIX century, introduced hygiene as a compulsory course. The era of large-scale reforms, new University charter introduction, experimental research methods emergence, and, at the same time, remaining urgent issues of the spread of epidemic diseases made the opening of hygiene departments a foregone conclusion, which is urgently required.

However, despite the long-term evolution of the hygiene department activities in imperial and Soviet times, the formation and subsequent institutionalization of teaching hygiene as a subject of study was not comprehensively covered in Russian historiography.

In the existing context of a thematically diverse research paradigm focused on higher medical educational history problems, the plots of scientific school formations in general and, in particular, the problems associated with hygiene institutionalization remain poorly understood. Currently existing special studies of the history of the department of hygiene organization in Russia and monographs and textbook publications of the general historical and medical field, containing contradictory information that does not comply with some important details and aspects of the formation of teaching

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traditions in this discipline, lay down in the latter half of the XIX century [1–4].

Current situation analysis in the modern historiography of this issue identified some unsolved system-forming problems that generalized the main directions of the scientific study of hygiene development in historical and medical aspects from an organizational point of view.

Therefore, highlighting several scientific problems and their corresponding main directions is important.

**Terminological problems are** inherent in numerous intellectual constructions of historical and medical research in the field of hygiene institutionalization as an educational and scientific discipline.

The most pressing issues related to this problem include discussions on the definition of the essence and characteristics of the "scientific school," as well as the comprehension of the terms "course" and "department," which is often not identical in its status to "associate professorship," but sometimes accepted in scientific discourse.

Another plane of terminological problems in the research field concerns the exact, complete, and relevant name of the department of hygiene for each period.

A significant reason for the confusion in some archival documents in this regard consists in a plurality of inaccuracies that arose with various name appearance of the course and/or department in the official document flow of the Ministry of Public Education of the Russian Empire and institutions of higher medical education.

The situation was often aggravated by the fragmentation and lack of unity to determine the institutional status of hygiene as a discipline taught in the personal documents of the professorial corporation representatives of these institutions, who participated both in project creation for relevant department organization and the subsequent functioning of the created unit.

**Chronological problems** associated with determining the actual beginning of teaching hygiene as an independent course according to the time of emergence of the Department of Hygiene as a structural unit in various institutions of higher medical education of the Russian Empire.

Numerous references in publications of issued decrees and newly approved editions of the University Charters, which are identified by many authors with the emergence time of the departments, refer to the same problems. However, as confirmed by archival documents on many university department examples, the time difference between the decision to open a department "on paper" and the actual start of teaching any discipline is sometimes calculated in months, years, and even decades due to a variety of factors, usually associated with bureaucratic acrimony, as well as economic and social conditions that are relevant during a particular department organization.

In addition, the department foundation "on paper" is not a system-forming and completely transparent starting point for the department history, contrarily, the start of teaching serves as a clear proof of the practical commencement of the department's work, which began with the educational interaction of teachers and students.

**Prosopographic problems** affected the biography research of scientists, whose activities are associated with the formation and development of teaching hygienic courses and, therefore, the independent institution departmental design.

This study aimed to determine the historical priority in the commencement issue of teaching hygiene as an independent discipline on the scale of higher educational institution activities of the Russian Empire, as well as clarify the historical data regarding the start of the work of the departments of hygiene at Kazan University and the Medical-Surgical Academy in St. Petersburg, which served for a long time as the subject of scientific discussion.

Identifying and comparing three indicators are important:

a) establishing the departments of hygiene in Kazan and St. Petersburg legally "on paper,"

b) actual start of teaching hygiene as a discipline to medical students by the first teachers of hygiene at each department; and

c) establishing a regular work of the department staff as an independent institution of higher education subdivision.

The lower chronological limit of this study is organically 1,863 as the introduction time of the University Charter new edition and the upper limit is 1,869 during the resolution of the issue of holding the position of hygiene professor at Kazan University.

Based on published data and unpublished archival materials deposited in the Russian State Military Historical Archives (Moscow), the Russian State Historical Archives (St. Petersburg), and the State Archives of the Republic of Tatarstan (Kazan), reconstructing the process of teaching initiation at the first departments of hygiene in Russia is possible, with significant progress in solving designated scientific issues.

On June 18, 1863, the new University Charter was approved and gradually put into effect. Accordingly, the department of forensic medicine with the toxicology, hygiene, and medical police was created at the medical faculty of Kazan University, with 16 professors and 17 associate professors [5]. In the section of the report of Kazan University for 1864, "A. Composition by faculties and departments" the department of hygiene, which was supposed to be open according to the Charter, appears with its full name according to the Charter as "forensic medicine with toxicology, hygiene, and medical police" [6]. The last part in the name of the department "hygiene with the medical police" was in some subsequent documents and is designated as an independent "associate professorship" [7].

Three months before the Charter introduction on March 19, 1863, the Council of Kazan University received a petition from A.I. Jacobiy, Doctor of Medicine, Surgery, and Obstetrics of the Julio-Maximilian Academy introducing a new Charter edition "Having now, given the introduction of a new University Charter, which requires a special department and associate professorship in general pathology, I have the honor to present, for the consideration of the Council, my desire to hold the position of associate professor in general pathology" [8].

The Council of Kazan University supported the petition; however, offering Jacobiy the position of associate professor in the Department of forensic medicine, as he is mentioned in the Faculty of Medicine documents since October 1864 [9].

After being assigned to the Department of forensic medicine with toxicology, hygiene, and medical police, associate professor Jacobiy, in the shortest possible time, comprehended the scientific and pedagogical task set and started the regular teaching of hygiene.

Therefore, in the Faculty of Medicine meeting minutes on January 30, 1865, the program for teaching lectures on private and general hygiene and dietetics, presented by Associate Professor Jacobiy, was considered and approved [10].

Unfortunately, no timetable for medical students for the second semester of the 1864–1865 academic years was found among the preserved archival documents. However, the examination sheets for the specified period have survived, including the sheets of "tests in hygiene and medical police," dated May 1865 [11]. The sheets contain a surname list and marks of the third-year medical students (with one border of the Siberian Territory) and fifth-year students (including non-degree students) who took the exam.

In addition to the surname and the mark of the examiner Associate Professor Jacobiy, an additional examination mark of the "deputy" Sutkovsky, who was present at the exam together with Jacobiy, was found. The archive also contains a list of an additional exam in hygiene, which was scheduled and held on August 31, 1865, since several students failed the exam during the first attempt.

Associate Professor Jacobiy, who established himself as a responsible teaching guild representative, was approved in the spring of 1865 as an extraordinary professor in the Department of Forensic Medicine (as evidenced by the voting data of the Faculty of Medicine members and the Council of Kazan University, and approval by the Ministry of Public Education order). In April 1866, he received the majority of electoral votes in favor of ordinary professor transition [12–14]. Receiving a new position, Jacobiy continued his regular work with students on hygiene, presenting in an overview of teaching for the 1866-1867 academic year, the schedule of a general hygiene course for third-year students with a frequency of 1 hour per week [15].

The Imperial Medical-Surgical Academy (IMSA) approved the need to create a separate department of hygiene by the mid-1860s.

In March 1865, the Military Council of the Ministry of War of the Russian Empire supported the petition of the Conference of the Academy to establish two new departments, hygiene, and operative surgery, at the IMSA. On March 30, 1865, the proposal had the highest approval [16].

In June 1865, a discussion of the approved proposal was held in the Department of State Economy of the State Council, recorded in an extract from the journal of this department dated June 11, 1865, under number 389 [17]. The document indicated the peculiarities of financing the Department of Hygiene opening "The State Council, having considered the submission of the Minister of War to establish two new departments in the Medical and Surgical Academy, with a prosector at one of them, and assuming that the suggestion of the Military Council on the establishment of two new departments in the Medical and Surgical Academy was awarded the highest approval in March of this year, it was decided to approve the present submission and, as a result, to submit to the Minister of War, starting from the future 1866, to contribute 7365 rubles a year to the subdivision of the Medical and Surgical Academy expenditure estimates for the maintenance of two departments in that academy for teaching hygiene and operative surgery and a prosector at the Department of Surgery" [18].

This opinion, formalized as an official conclusion of the Department of State Economy, was signed and ordered to implement by Emperor Alexander II, which was attested by the Chairman of the State Council, Grand Duke Konstantin Nikolaevich on July 20, 1865 [19].

On July 30, 1865, Minister of War D.A. Milyutin signed order No. 274, which the Military Council, on the recommendation of the IMSA President, considered proposals drawn up by a special Commission of Academy professors and approved by the Conference of the Academy regarding the necessary transformations "*for full adaptation into the military medicine and surgery practical teaching*."

"Explanation when teaching a hygiene course:

a) comparative statistics of diseases of military ranks and other non-military populations of the country, which explains the difference in morbidity of military ranks compared with the civilian population;

b) describe in detail the military medical institutions, with their historical development and range of activities, and a comparative overview of similar institutions in the main European states, and finally, send fifth-year students to factories and military barracks during vacations, as their soldiers stay in hospitals and other similar institutions in the summer to study by experience the conditions that are harmful to human health, when they are crowded and when working with substances with a harmful effect on the human body.

Separate teaching hygiene from forensic medicine and, in doing so, decide the following:

*l)* courses of hygiene and military hygiene, both land and sea, presentation.

2) at this department: a) comparative disease statistics of military and non-military people to clarify their conditions and causes of diseases and b) about military medical institutions of Russians and the best international ones" [20].

The support received from the state authorities and the official decision to create the Department of Hygiene allowed the IMSA professorial corporation representatives to intensify discussions about the head position candidate.

On October 2, 1865, a special commission was created at the IMSA "to discuss the issue of filling the newly established department of public hygiene and medical police," [21] which included "members of the Academy Sechenov, Kitter, Chistovich, Borodin, Yakubovich, Khlebnikov, and Zablotsky."

By December 1865, many members of the Commission came to a consensus on some issues, particularly on the complete course of public hygiene that should "correspond to the curriculum of this science in international universities, in the academic section presentations of this course from the general science instructions to private issue disclosures of medical police, as well as individual issues of military and naval life, since etymological and sanitary issues should be universally supported by comparative statistics" [22]. Concurrently, the public hygiene course should include information about the country's medical institutions, both the historical development and current state [23]. However, during the discussion, dissenting opinions appeared leading the academic corporation to disagreements on some fundamentally important issues. Thus, the opinion of Professor Yakov Alekseevich Chistovich, announced on December 24, 1865, while serving as a member of the Commission, is very interesting. He identified two fundamental problems "*regarding the subjects that should be included in the new department and regarding the choice of persons who could satisfactorily fulfill the departmental teaching duties*" [24, 25].

Concerning the second problem, Ya.A. Chistovich noted: "I believe that a teacher of hygiene, first of all, should combine in himself the most complete knowledge of physiology, physics, and organic chemistry (not to mention his awareness as a physician of other medical and natural sciences) and, at the same time, possess well-known technical training of contemporary physiological and chemical research methods application... in addition, he must have the correct understanding of the meaning and methods of statistical research, performed in many cases in the explanation and confirmation of hygienic conclusions and instructions...." [26].

It was at this moment (regarding the issue of filling the department of hygiene), for the first time in the historical IMSA documents, the name of the associate professor Ivan Maksimovich Sorokin appears.

Ya.A. Chistovich, proposing a candidate for the head position of the newly created Department of Hygiene, said: "...by applying this voluminous requirement to a person who could fulfill the program of teaching public hygiene and medical police, I consider it necessary to draw the attention of the Commission to the Adjunct Professor at the Department of Forensic Medicine and hygiene, I.M. Sorokin" [27].

The candidacy of I.M. Sorokin, nominated by Chistovich, was considered by the Commission in detail, analyzing his scientific works and hearing the documents received from the secretariat of the Conference, which included a note "*about Sorokin's scientific and official activities*" and the program "for teaching hygiene" that he compiled [28].

On February 3, 1866, during the final discussion by the Commission of the question of the head candidacy, the existing disagreement between the members was recognized and expressed in the submission of three dissenting opinions: a) I.M. Sechenov, b) A.A. Kitter and P.P. Zablotsky, and c) Ya.A. Chistovich, joined by N.M. Yakubovich, P.A. Khlebniko, and A.P. Borodin. Most of the Commission members shared the opinion of Professor Ya.A. Chistovich regarding the election of the candidacy of Adjunct Professor I.M. Sorokin, considering him fully prepared for the position at the Department of Hygiene. However, Kitter and Zablotskiy "did not see the full amount of required qualities in this candidate" and, therefore, disagree with the majority of the Commission members, believing that "... Sorokin will not have time to acquire sufficient responsibility either for general and private hygiene or for the medical police" [29].

Nevertheless, during the discussion of the opinions put forward, the Commission made a decision, according to which, "Sorokin is considered as a worthy candidate for holding the Department of General and Military Hygiene" [30].

Interestingly, I.M. Sorokin, after completing his gymnasium course in 1851, entered the medical faculty of the Imperial Kazan University in the same year, and then transferred to year 4 of the IMSA in 1854 [31]. Since 1855, I.M. Sorokin worked as an intern in the therapeutic clinic of the famous associate professor P.D. Shipulinsky, and in 1856 graduated from the course of medical sciences with the title of a doctor with the so-called "*certificate of commendation*." On March 24, 1856, he was assigned to the First Military Land Hospital as a supernumerary resident "*having various patients, partly in the therapeutic department, at the same time performed forensic and pathological autopsies of all patients who died in the hospital*" [32].

In 1857, I.M. Sorokin passed the degree for the doctor of medicine exam and from March 18 to August 30, he went on a business trip to the Krasnoselsky hospital, after which he was sent to Moscow on September 28, and to Kaluga on November 10 to accompany the marching battalions, in the same year. At the end of 1857, Sorokin was assigned to the Second Military Land Hospital, where he "had chambers, first in the therapeutic department, and then in the forensic department, and was engaged in chemistry and histology at the Academy" [33].

By the end of 1859, I.M. Sorokin completed his dissertation research for the degree of Doctor of Medicine entitled "On pus in histological terms," having publicly defended at the IMSA Conference on January 16, 1860. One of his most famous works was the article, "the action of bitter almond oil on the nervous and muscular system," published in the tenth issue of the Military Medical Journal.

On October 18, 1860, I.M. Sorokin was sent abroad to improve his knowledge in the field of hygiene and toxicology. During his overseas internship, which lasted until August 1863, "... he practically studied in chemical, physiological, and pathological laboratories with professors and assistants Brücke, Scherer, Kelliker, Knapp, Virchow, and Kone, and attended lectures by various German and French professors. He examined hospitals and barracks in Berlin and Paris in terms of hygiene" [34].

On October 12, 1863, I.M. Sorokin, having retired from the hospital, was elected as Adjunct Professor of the Department of Forensic Medicine of the IMSA, where, after giving a test lecture in the same year, he was approved in the position. Sorokin was entrusted with lectures at the "*Thanatological department of forensic medicine and toxicology*," as well as "guiding fourth-year students in forensic autopsies." It was especially noted that Sorokin "started to give hygiene lectures" at the IMSA "since November 1865" [35].

However, despite the readiness of the majority of professors to approve I.M. Sorokin as the head of the Department of Hygiene, some difficulties arose associated with the interference of the Minister of War of the Russian Empire D.A. Milyutin.

On February 7, 1866, the IMSA President P.A. Dubovitsky reported that after reading the note from the IMSA Conference on the case progress on the subject of filing the new Department of Hygiene, D.A. Milyutin left the following resolution: "Among the indispensable conditions that every competitor must meet for the department of military hygiene, I recognize it necessary to decide on practical acquaintance with military service and the way of life of soldiers, and, therefore, I impose as an administrative duty of the Academy to not only eliminate the contestants with the advantage of the experience gained by serving with the troops in peacetime and wartime but on the contrary, not otherwise, as such doctors who have studied practically the life of soldiers, not only in barracks and apartments but also in expeditions" [36].

On January 1, 1867, a competition was announced for holding the position of ordinary professor of the Department of Hygiene, and the competition program was published, taking into account the recommendations of the minister. These included: "1. The competitor must be a doctor of medicine, with present evidence of his practical medical activities; 2. He must be well acquainted with the current state of physiology, physics, chemistry, physical geography, and the natural sciences in general; 3. He must know well the life of the Russian military class, therefore, only those doctors who, under other conditions, served as doctors in the army, both in peacetime and wartime, are allowed to participate in the competition; 4. The competitor must present his scientific works in

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general and, particularly, prove his hygiene practice with written works that belong to this science; 5. The competitor must submit a complete and detailed program of both general and military and maritime hygiene; and 6. A competitor, to prove his teaching abilities, should give two trial lectures on the subject of hygiene at the Academy Conference, one on the topic chosen by him, and the other as indicated by the Conference" [37].

According to the results of the competition, I.M. Sorokin, who read the corresponding course since November 1865, was officially elected for the Department of Hygiene, where he worked until October 1871. At that time, he was invited to hold the Department of Forensic Medicine with toxicology, after which the question of heading the Department of Hygiene arose again at the IMSA [38].

Thus, as seen from the archival documents, the first teacher and the first head of the Department of Hygiene at the IMSA was Ivan Maksimovich Sorokin, whose name was not associated with the beginning of teaching hygiene in St. Petersburg for more than 150 years.

Given the need to clarify the biographical data, we should mention the second head of the Department of Hygiene at the IMSA, Alexei Petrovich Dobroslavin.

According to the service record, Alexey Dobroslavin was "of the Orthodox confession, a native of the Oryol province, born on September 29, 1842, comes from the rank of chief officer's children, after completing a course of science at the Kaluga gymnasium, entered the Academy (IMSA) as a student educated and maintained by the state, recognized as a doctor with a silver medal diploma award, with the period of training September 19, 1859, to December 18, 1865, single" [39]. The documents also contain information about Alexey's father, Petr Alekseevich Dobroslavin, a graduate of the Department of Medical Sciences of Imperial Kazan University. P.A. Dobroslavin was approved as a doctor of the department, with the rank of collegiate adviser, and served in the Tarutinsky regiment of chasseurs as a "battalion" doctor, as well as a Voronezh Medical Council inspector [40].

In 1865–1868, A.P. Dobroslavin, along with other "*best pupils*," was assigned for 3 years to the IMSA and the Second Military Land Hospital "*for a scientific purpose*."

At the end of the secondment period, on December 22, 1868, at an IMSA meeting, they discussed the issue of "Sending doctors Dobroslavin, Dobrovolsky, Strobotov, and Chausov abroad." According to this question, the opinions of professors were heard, "who taught young doctors," containing information "about the scientific merits, their abilities, and diligence" of each doctor.

Opinions about A.P. Dobroslavin were represented by academicians Zinin and Trapp, professors Zybelin, Borodin, Rudnev, and Shestov [41].

Dr. Dobroslavin, during his 3-year activity at the IMSA, "worked constantly, first in a chemical laboratory, and then in a pharmaceutical laboratory." His written scientific works were described in detail: "1. About protein" [42], "2. On Brown's reaction to the sugar in urine" [43] indicating his publication in the Society of Russian Physicians in 1867, "3. Materials for the physiology of metamorphosis" [44] in two sections, "4. The effect of iron administered into the body on urea excretion, temperature, and body weight" [45], and "5. The ratio of protein to suboxide and iron oxide salts and its influence in different conditions of their organisms" [46].

The conclusions of the scientists were unanimous: "Taking into account the 3-year activity of Dr. Dobroslavin, the aforementioned professors consider him quite commendable for a business trip abroad. The detailed analysis of Dr. Dobroslavin's works asserts to become a figure useful for medicine and science in general" [47].

The IMSA funds allowed the allowance issuance for sending four doctors abroad for a scientific purpose, and according to the ballot, all four proposed candidates were recognized as commendable. The voting resulted to 22 votes in favor of Dobroslavin, 20 for Dobrovolsky, 15 for Skrobotov, and 12 for Chausov. The IMSA conference decided to pay them all, irrespective of the allowance received in the service, 1200 rubles a year at the diplomatic rate [48].

On February 6, 1869, all these candidates, noted as most distinguished for their "*outstanding talents and scientific activity*," were sent abroad "*for special education*." Dobroslavin was sent for advancement in the field of chemistry while preserving the allowance he received as a junior resident and assigning an additional allowance of 1,200 rubles a year [49].

On February 11, 1871, A.P. Dobroslavin returned from an overseas business trip and presented a report to the head of the IMSA on the performed work [50].

By March 1871, the Main Military Medical Directorate appointed A.P. Dobroslavin a physician for business trips in the military medical department, with a secondment to a clinical hospital for 1 year [51].

Concurrently, the IMSA Conference decision proposed for Dobroslavin to give a public (*demonstration*) lecture on public hygiene.

This proposal was accepted, and Dobroslavin gave a lecture on "The quantitative study of the constituent parts of air, and especially carbon dioxide and ammonia" on March 13, 1871 [52].

The IMSA conference discussion on the lecture quality, by secret ballot on March 20, 1871, decided to elect Dobroslavin as a private assistant professor. A total of 20 Conference members were in favor, whereas 4 were against the candidacy of A.P. Dobroslavin, thus Dobroslavin was approved as a private assistant professor "*in terms of hygiene*." Officially, the document on "*The recognition of the doctor of medicine Dobroslavin as a privat-docent of the Academy*" was published on April 6, 1871, under the number 975 [53].

Having started his professional career at the Department of Hygiene as an associate professor, Dobroslavin, perhaps, could have stayed there for many years. However, in the autumn of 1871, the head of the Department of Hygiene, Professor I.M. Sorokin, received an invitation to hold the opening of the vacancy in the department of forensic medicine with toxicology, which he accepted.

Therefore, on October 2, 1871, the IMSA Conference declared the Department of Hygiene vacant. To consider the issue of filling the Department of Hygiene, a special commission was created, which included professors Zinin, Sorokin, Zabelin, Zavarykin, and Ravich.

On October 25, 1871, during the discussion, the commission concluded the necessity to search for a temporary candidate responsible for the department, "since it will not most likely be filled soon, and acquaintance with public hygiene is one of the most essential needs of medical education."

The commission considered Dobroslavin a suitable candidate, who made a favorable impression, taking into account his activities and his written works: "Most of these works either contain new scientific facts or critical research method assessments and all serve as evidence of the author's thorough acquaintance with both the methods of developing hygienic issues and the practical side of hygiene in its application to military and social life. In addition, since Dobroslavin was elected a private assistant professor, under his leadership, 6 doctors engaged in the study of various issues related to scientific or applied hygiene field." According to this opinion, the commission recognized Dobroslavin as worthy of the title of Adjunct Professor in the Department of Hygiene and decided to allow him to read trial lectures [54].

At the same meeting, the IMSA Conference decided to conduct hygiene teaching to fourth-year students in the current 1871–1872 academic year by the "Assistant Professor Dobroslavin, who is on assignment to the Academy" [55].

On November 12, 1871, the decision of the Academy was supported by the order of the chief military medical inspector for the IMSA on "the assignment of the temporary hygiene teaching to associate professor Dobroslavin" [56]. According to article 1054 XV of the Book of the Code of Military Orders of 1869, the IMSA Conference has the right, "according to its choice," to entrust teaching to one of the "available teachers" before filling the vacancy of a teacher, "but not longer than one year" [57].

On February 5, 1872, A.P. Dobroslavin gave the first lecture on "*The absorption of personal sub-stances by the body, depending on their preparation method*," and on March 4, 1872, he gave the second lecture on "*The physical properties of fabrics used for clothing*."

The quality of his lectures was considered satisfactory, and A.P. Dobroslavin was elected as Adjunct Professor in the Department of Hygiene, which on March 30, 1872, was approved by the chief military medical inspector for IMSA [58].

Thus, summing up the study results, the main conclusions are highlighted as follows:

1. Regular teaching of hygiene as an independent discipline started in the second semester of the 1864–1865 academic year at the Faculty of Medicine of the Imperial Kazan University.

2. The first teacher of hygiene in Russia was Arkady Ivanovich Yakobiy.

3. Regular teaching of hygiene at the Imperial Medical-Surgical Academy in St. Petersburg was established in November 1865.

4. The first teacher of hygiene at the Imperial Medical-Surgical Academy and the first head of the Department of Hygiene was Ivan Maksimovich Sorokin.

5. The second head of the Department of Hygiene at the Imperial Medical-Surgical Academy was Alexey Petrovich Dobroslavin, who started teaching in 1872.

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- 14. Gosudarstvennyy arkhiv RT. F. 977. Op. Sovet. D. 4756. L. 246.ob. (In Russ.)

15. Gosudarstvennyy arkhiv RT. F. 977. Op. Sovet. D. 4756. L. 299.ob. (In Russ.)

- 16. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 46. D. 407. L. 2.ob. (In Russ.)
- 17. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 46. D. 407. L. 2. (In Russ.)
- 18. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 46. D. 407. L. 2.ob. (In Russ.)
- 19. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 46. D. 407. L. 2. (In Russ.)

20. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 46. D. 407. L. 10–10.ob. (In Russ.)

- 21. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 8. D. 35. L. 2–2.ob. (In Russ.)
- 22. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 8. D. 35. L. 1–1.ob. (In Russ.)
- 23. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 8. D. 35. L. 1–1.ob. (In Russ.)
- 24. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 8. D. 35. L. 2–2.ob. (In Russ.)

25. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 8. D. 35. L. 2–2.ob. (In Russ.)

- 26. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 8. D. 35. L. 3–3.ob. (In Russ.)
- 27. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 8. D. 35. L. 3–3.ob. (In Russ.)

28. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 8. D. 35. L. 20–21. (In Russ.)

- 29. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 8. D. 35. L. 22–23. (In Russ.)
- 30. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 8. D. 35. L. 20–21. (In Russ.)
- 31. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 35. D. 8. L. 5. (In Russ.)
- 32. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 35. D. 8. L. 5–5.ob. (In Russ.)
- 33. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 35. D. 8. L. 5.ob. (In Russ.)
- 34. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 35. D. 8. L. 6–6.ob. (In Russ.)
- 35. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 35. D. 8. L. 6.ob. (In Russ.)
- 36. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 8. D. 35. L. 18. (In Russ.)
- 37. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 35. D. 8. L. 42. (In Russ.)
- 38. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 60. D. 562. L. 19. (In Russ.)
- 39. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 51. D. 756. L. 1.ob-2. (In Russ.)
- 40. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 63. D. 1986. L. 6. (In Russ.)
- 41. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 47. D. 69. L. 1–1.ob. (In Russ.)
- 42. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 47. D. 69. L. 1.ob. (In Russ.)
- 43. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 47. D. 69. L. 2. (In Russ.)
- 44. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 47. D. 69. L. 2.ob. (In Russ.)
- 45. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 47. D. 69. L. 3. (In Russ.)
- 46. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 47. D. 69. L. 3.ob. (In Russ.)
- 47. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 47. D. 69. L. 3.ob.-4. (In Russ.)
- 48. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 47. D. 69. L. 8. (In Russ.)
- 49. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 47. D. 69. L. 12. (In Russ.)
- 50. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 60. D. 562. L. 10. (In Russ.)
- 51. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 60. D. 562. L. 13. (In Russ.)
- 52. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 60. D. 562. L. 14. (In Russ.)
- 53. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 60. D. 562. L. 14.ob.–15. (In Russ.)
- 54. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 60. D. 562. L. 25–25.ob. (In Russ.)
- 55. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 60. D. 562. L. 19. (In Russ.)
- 56. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 60. D. 562. L. 21. (In Russ.)
- 57. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 60. D. 562. L. 22. (In Russ.)
- 58. Rossiyskiy gosudarstvennyy voenno-istoricheskiy arkhiv. F. 316. Op. 60. D. 562, 208. L. 27. (In Russ.)