

# The institutionalisation of military medical education in Russia in the period from the second half of the 17th century to the 1930s

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## Abstract

This article looks at the institutionalisation of military medical education in Russia. The ongoing reforms to Russia's armed forces have made the history of military medical education highly relevant. The reform process is complicated, and turning to history can help to avoid potentially serious mistakes: studying the experiences of previous generations helps to identify patterns in the development of a particular process. The author examines the institutionalisation of military medical education as a process involving the establishment of its main components: clinical training and the specifically military components of the education received by future military doctors. The article shows that the clinical component was established through the introduction of clinical training, with clinical subjects taught in stages, and an effective system of testing students being put in place. The military component was established through expanding the scope of the military medical subjects taught in the curriculum, and military doctors being given legal status as officers with full authority in terms of the management of the military medical service. When these components had been fully established, in 1936, this meant that the institutionalisation of military medical education in Russia was complete.

## Keywords

history of medicine, military medicine, military medical education, institutionalization of medical education, clinical training

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A military doctor's profession involves combining two key aspects, bearing in mind that military doctors are military personnel – officers – on one hand, and qualified medical specialists on the other. This article aims to show that the institutionalisation of military medical education in Russia is inseparably linked to the development of these two aspects, which define the nature of a military doctor's profession, and to show the historical background of this process and the periods into which it can be divided. The analysis of the institutionalisation of military medical education is complemented by details of the historical aspects of the legal status of military doctors in the Russian army. Its history has been into periods based on the introduction of military medical subjects (battlefield surgery, military hygiene, the organisation and tactics of the medical service, and so on) into the curriculum for military doctors, as this represents a key feature of the education received by military doctors.

The history of higher medical education is a key theme in Russian medical historiography. At the same time, one of the essential aspects of the history of medical education is the history of military medical education, since “the state of medical education arose in Russia, primarily as a system of education for military doctors” (Istoriya voennoy meditsiny... 2002, p. 50). For example, during the first half of the eighteenth century Russia's military hospital schools “worked” mainly for the army and navy (Palkin 1959).

In the pre-revolutionary period, the best-known work on military medical education in Russia was “A History of the Imperial Military Medical Academy (formerly the Academy of Medicine and Surgery) in the Hundred Years 1798–1898”, edited by Professor Nikolai Ivanovskii (Istoriya Imperatorskoy... 1898). The topic also attracted the attention of researchers in the Soviet period (Palkin 1959, Semeki 1946). Subse-

quently, a major contribution to research into military medical education has been made by Anatolii Budko and his co-authors (Budko et al. 2001, Budko and Zhuravlev 2003, Budko and Zhuravlev 2005). Mikhail Kozovenko's work (Kozovenko 2001) is devoted to the historical aspect of military medical education. However, the works available to us present either individual periods in the history of military medical education, or a history of the development of the departments at the Military Medical Academy (the only exception appears to be the work by Kozovenko). As such, we do not have an overall picture of the institutionalisation of military medical education in Russia.

The institutionalisation of military medical education was a complex and protracted process, for which the way was paved by the changes that took place in Russia in the first half of the seventeenth century. Foremost among these was Muscovy's economic recovery after the Time of Troubles. This process lasted throughout the first half of the seventeenth century (Zuev 1994). Another important aspect was the need to reform the army in order to achieve the objective of liberating some of the Russian lands that had fallen under Polish control. An important aspect of this was the establishment of "foreign formation regiments", whose command staff consisted entirely of foreigners, and, according to their staffing list, were meant to have a regimental doctor (Istoriya voennoy meditsiny... 2002). At the same time, the Russian army's first manual, the "Military book on all kinds of shooting and artifices of fire", was published, in 1620. Here, the position of regimental doctor was referred to for the first time as a staffing position in a military unit. Today, this document is said to mark the start of the establishment of the military medical service in Russia (Istoriya voennoy meditsiny... 2002, p. 65). Clearly, the establishment in the army of the position of military medical worker, and, indeed, of the military medical service as a whole, meant it needed to be filled, which, in turn, necessitated military medical education in the country. Accordingly, the institutionalisation of military medical education in Russia may be said to have begun in the mid-seventeenth century.

Muscovy's first, and only, educational institution in training medical personnel was the doctor's school of the Apothecary Prikaz.<sup>1</sup> This was founded in 1654, and its graduates became doctors and doctor's assistants, and were sent mainly to the troops. On joining the school, the students took an oath in which they promised "to serve... loyally the city, regimental service, where the great Prince directs" (Uchebnik istorii meditsiny... 1951, p. 24). The school's curriculum included subjects such as anatomy, pathology, the treatment of internal diseases, and pharmacology. Typically, after three years of study, the students were allocated

to their teachers, at whose houses they studied surgery techniques (Kruchek-Golubov and Kulbin 1902). It was not uncommon for the students to travel with their teachers to sites of military action, ensuring that the school's graduates received good practical training. Hence, according to evidence from the graduates themselves, they treated not only wounds, but also internal diseases (Istoriya voennoy meditsiny... 2002). Accordingly, even while military medical education was in its infancy, military medical workers were already being trained not only as specialists familiar with military pathology, but also as doctors capable of providing medical assistance in peacetime. The prominent Soviet physiologist Konstantin Bykov called the Apothecary Prikaz doctor's school "the first state military medical school in Russia" (Uchebnik istorii meditsiny... 1951, p. 24).

In the eighteenth century, military medical workers for the Russian army were trained at military hospital schools. These educational establishments were located at major military hospitals, which served as their clinical base. An analysis of teaching procedures at the schools shows that they paid reasonable attention to the future military doctors' general clinical training. As part of their training, the students looked after patients, performed doctoral functions, and served on duty at the hospital. According to instructions from 1754, special wards were allocated at the hospitals, where patients were selected for "teaching purposes" (Palkin 1959). In addition, each student had to maintain case histories ("sick notes") (Palkin 1959, p. 46). During this period a fully effective system of testing the students was developed, involving so-called "third" exams (i.e. covering a third of the year) and a year-end "general exam" (Palkin 1959, p. 50). From 1754, the exams were divided into private and public (the latter took place in the presence of invited individuals).

This period also saw the emergence of another element of military medical education, thanks to which military doctors became not only medically qualified specialists, but also professionals in the field of military pathology. Given the nature of military pathology, even at the Apothecary Prikaz school much attention was paid to the study of surgery and anatomy, as well as to developing the skills required to provide medical assistance in wartime. In the eighteenth century, military hospital school graduates were trained mainly for service in the army and navy. Despite the lack of specialised military medical subjects in the curriculum, the nature of the graduates' future work was taken into account. For example, in 1737 the archiater Johann Bernhard Fischer ordered military hospital schools to be provided with a regimental doctor's kit so that students could study their use in practice and learn more about the details of battlefield surgery techniques. Military hospital school teachers were also expected to

<sup>1</sup> A prikaz was a government department.

familiarise their students with the specific features of illnesses affecting military personnel. The division into land and sea sections was also taken into account. For example, the medical chancellery recommended that military hospital schools should produce specialists familiar with illnesses affecting soldiers and sailors (Chistovich 1883, p. 267). However, the teaching of aspects of military medicine was not enshrined in the curriculum, and, accordingly, was not systematic in this period.

During this period, the legal status of a military doctor was extremely unclear. Under a decree issued in 1729, military medical workers were assigned ranks equivalent to those in the military: a senior doctor to a captain/lieutenant, a doctor to a second lieutenant (Akopyan et al. 2013). However, this was merely an attempt to define their legal status in conditions where they were not assigned a military rank and therefore had no powers of authority, which frequently resulted in their rights being violated. For example, in the eighteenth century there were cases of senior officers treating a regimental doctor like a batman or valet (Akopyan et al. 2013).

Thus, the foundations were laid in Russia from the mid-seventeenth to early nineteenth century for future military doctors both to receive clinical training and to learn about the specific features of military pathology. However, the teaching of aspects of military medicine was not yet systematic in this period. The fact that military doctors did not have an officer's rank had an extremely adverse impact on their personal and service-related status.

The next stage of the institutionalisation of military medical education in Russia began in 1809, when Professor K.F. Uden of the Saint Petersburg Academy of Medicine and Surgery (AMS) started lecturing on the principles of military medicine (Istoriya voennoy meditsiny... 2008). Historically, the way was paved for this by the rapid development of the natural sciences around the turn of the nineteenth century and of medical science. It was during this period that discoveries were made in diagnostics (the discovery of the method of percussion and auscultation), while the method of comparative clinical anatomy (comparison of features of diseases in living patients, and autopsy results, with the normal functioning of the organs) was introduced into clinical practice in the early nineteenth century. Another factor came in the form of the first theoretical works by Russian authors – “On the benefit and objects of military hygiene, or the science of maintaining the health of military personnel” (1809), by Professor Matvei Mudrov of the Faculty of Medicine at the Imperial University of Moscow, and “A pocketbook of military hygiene, or notes on maintaining the health of Russian soldiers” (1813), by Ilya Enegolm, an inspector at the Saint Petersburg AMS. These summarised the practical experience of the Russian army's military medical service.

At this time, specific aspects of military medicine could now be found in the curriculum. For example, departments of theoretical surgery considered issues such as wounding with shot, canister shot, and so on (Karpenko et al. 2018), while a chapter on “Care for the maintenance of the health of Russian troops”, which looked at various aspects of military hygiene, was added to the programme of the Department of Legal Medicine and Medical Police. Thus, it may be said that specific aspects of military medicine were enshrined in the curriculum for the first time during this period.

The merger of the Second Military Army hospital with the Saint Petersburg AMS in 1840, and of the Naval Hospital with it in 1850, significantly strengthened and consolidated the clinical base provided by military hospitals. Full implementation of clinical training – i.e. learning at a patient's bedside – became possible. The Academy students served on duty at military hospital units, managed patients under the care of resident physicians, and maintained case histories.

In 1838, military doctors joined the ranks of the “officials of the military department”, but this did not mean they were assigned an officer ranking. Unlike their foreign colleagues, who, in most European countries in the last quarter of the nineteenth century made up a corps of sanitary officers, Russia's military doctors remained outside the officer corps, and, accordingly, had no administrative functions. Consequently, treatment and evacuation practices were overseen by troop officers, which was generally not good for the wounded.

Thus, both of the clinical component and the specialist training for military doctors continued to be strengthened in this period, while the teaching of aspects of military medicine was enshrined in the curriculum.

The next period in the institutionalisation of military medical education in Russia may be regarded as starting in 1869, when the first course in military medical subjects – a course in battlefield surgery – was established at the Saint Petersburg AMS. The way was paved for this by the further development of medical science and the development of military medical theory in the works of Nikolai Pirogov. Another factor was that the military medical service's mission had become more complicated, a result of the increase in army numbers following the military reforms by the Minister of War, Dmitrii Miliutin, whose policies included the introduction of compulsory military service. Another reason was the replacement of smooth bore weapons with rifled ones, the use of which led to injuries more severe in nature, and, consequently, serious complications (Pirogov 1865–1866).

Apart from battlefield surgery, this period saw the establishment of a course on military hygiene (in 1882), and then (in 1911) of a course on the military sanitation service, with teaching on illnesses affecting military personnel, and brief information on military admini-

nistration. Thus, specific aspects of military medicine, which had previously been taught in various departments, were brought together for the first time in specialist military medical course programmes.

Prior to the October Revolution in 1917, the training of future military doctors continued at the Saint Petersburg AMS, with the use of clinical training and clinical subjects being taught in stages, and there was a strict and effective system for testing the students. After 1917, the focus shifted towards “proletarianisation” of the students. The entrance exams were abolished, and the requirements for the trainees were significantly reduced. Exams took place using a “group” method: the grade awarded to one student was assigned to the whole group. In 1925, for the first time in the Academy’s history, it was decided to abolish the course and state exams. Another negative development was the reduction in the proportion of medical academic subjects (from 55% in 1915 to 39% in 1929) (Kozovenko 2001).

In 1918, an event took place that had a significant impact on the legal status of military doctors: for the first time, doctors were put in charge of overseeing treatment and evacuation support in a theatre of operations. However, this event had no effect on the legal status of military doctors.

The final period of the institutionalisation of military medical education in Russia (1929–1936) can be said to have started in 1929, when the first military medical department – the Department of Military and Military Sanitation Disciplines – was established at the Military Medical Academy. This was founded for objective reasons: major studies carried out by the Red Army around the turn of the 1930s had identified significant shortcomings in the doctors’ sanitary and tactical training. For example, it turned out that military doctors did not know how to use a map, a compass, or communications devices, and, most importantly, did not have the necessary skills to provide professional emergency medical care on the battlefield. In the course of a Revolutionary Military Council inspection of the Academy in 1930, it was decided to strengthen the military component of military doctors’ training. Accordingly, a Department of Battlefield Surgery was established in 1931, and a Department of Military Hygiene in 1936. The creation of the first military medical departments at the Academy was the final act in the establishment of an important component of military doctors’ education, under which

they were regarded as specialists in military pathology (battlefield surgery, military hygiene, the organisation and tactics of the medical service, and so on).

At the same time, clinical training for military doctors continued to undergo complex processes. In 1930, another review of the curriculum began. It was decided to merge a number of related departments. In 1931, the Propaedeutic, Faculty and Military Hospital departments were merged (Goncharov 1968), in violation of the principle that clinical subjects should be taught in stages, with medical students successively studying in propaedeutic, faculty and military hospital clinics. The length of study was also changed: the students’ time at the Academy was reduced to 4 years in 1931, and to 3 years, 8 months in 1932. However, it became clear quite quickly that these decisions were mistaken, and in 1934 the five-year study period at the Academy was restored, while from 1935 clinical subjects were once again taught in stages, and the exam system was reinstated. Thus, all the structural elements of the clinical component of a military doctor’s education that had been lost were restored.

In 1935, by a resolution of the Council of People’s Commissars, military doctors were made part of the Red Army’s command staff and assigned military insignia. In the Soviet Union, a military doctors’ core was formed.

The following conclusions may be drawn from all this. In the first period of the institutionalisation of military medical education in Russia (1654–1809), the teaching of specific aspects of military medicine was not systematic (it was sporadic). The second period (1809–1869) saw the teaching of aspects of military medicine enshrined in the curriculum. The third period (1869–1929) was marked by the establishment and successful running of courses in military medical subjects (battlefield surgery, military hygiene and the military sanitation service, with teaching on illnesses affecting military personnel and brief information on military administration). In the fourth period (1929–1936), the first military medical departments were created.

With the clinical and military components of military doctors’ education fully established, and military doctors being made part of the Red Army’s command staff and given full authority in the management of military medical procedures, the institutionalisation of military medical education in Russia was complete.

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