

Russian Medical Service During the Crimean War: New Perspectives

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Although Russian historiography of the Crimean War yields slightly to its English counterpart in output, it still includes dozens of works from solid multi-volumed research to popular science reviews. The majority of works written before the 1917 revolution were greatly influenced by the Paris peace of 1856 (dubbed ‘humiliating’) and tended to exaggerate the shortcomings of the Russian military and political system in the middle of the nineteenth century.¹ During the Soviet period — with its overwhelming party control over the social sciences — most research followed the Leninist thesis that the Crimean War ‘demonstrated the rottenness and impotence of feudal Russia’, and nothing suited this axiom more than the catastrophic situation with regard to the treatment of Russian wounded and sick during the conflict.² However, English historiography of the war has remained largely unaware of this. Apart from an article by John Curtiss on the Russian Sisters of Mercy, there is no work entirely devoted to the Russian medical service during the period from 1853 to 1856; and although in recent decades there has been an increasing number of books written in English about the Russian side of the conflict, their coverage of the Russian medical service is still quite fragmentary and produced without much assistance from Russian archival materials.³

¹ M. I. Bogdanovich, *Vostochnaya voina 1853–1856 gg.*, 4 vols (St Petersburg: Tip. Stasyulevicha, 1876); N. F. Dubrovin, *Istoriya Kruimskoi voynui i oboronui Sevastopolya*, 3 vols (St Petersburg: Tip. tovarishchestva ‘Obshchestvennaya pol’sa’, 1900); A. M. Zaionchkovsky, *Vostochnaya voina 1853–1856 gg., v svyazi s sovremennoi politicheskoi obstanovkoi*, 2 vols (St Petersburg: Ekspeditsiya izgotovleniya gosudarstvennuikh bumag, 1913); N. I. Kul’bin, ‘Vostochnaya voina 1853–1856 gg.’, in *Stoletie Voennogo Ministerstva*, 13 vols (St Petersburg: Tip. Vol’fa, 1902–14), VIII (1911), no. 4, 1–186.

² E. V. Tarle, *Kruimskaya voina*, 2 vols (Moscow: Izdatel'stvo Akademii Nauk SSSR, 1941–43); I. V. Bestuzhev, *Kruimskaya voina 1853–1856 gg.* (Moscow: Izdatel'stvo Akademii Nauk SSSR, 1956); L. Gorev, *Voina 1853–1856 gg. i oborona Sevastopolya* (Moscow: Voennoe Izdatel'stvo, 1955). The quotation is taken from V. I. Lenin, *Polnoe sobranie sochineny*, 5th edn, 55 vols (Moscow: Izdatel'stvo Politicheskoi literaturui, 1967–81), xx (1973), 173. All translations are the author’s own unless otherwise stated.

³ John Shelton Curtiss, ‘Russian Sisters of Mercy in the Crimea, 1854–1855’, *Slavic Review*, 25 (1966), 84–100; David Goldfrank, *The Origins of the Crimean War* (London: Routledge, 1994); Orlando Figes, *Crimea: The Last Crusade* (London: Allen Lane, 2010); Clive Ponting, *The Crimean War* (London: Pimlico, 2004).

In Russia itself at the time of the Crimean War, the fact that the vast majority of deaths occurred in hospitals rather than on the battlefield had caused a huge public outcry. Consequently, after the conflict the Russian government commenced a series of reforms to modernize the army medical system and adapt it to the realities of modern warfare. Overcrowded hospitals, men dying on the ground with minimal medical care available, heartless bureaucrats plundering the government's money — all became part of a new Crimean War mythology which obscured the real 'reason why'.⁴ Recently, however, Russian historians have produced new works on the subject which challenge conventional doctrines.⁵ The new research is based on extensive primary sources. Unpublished archival materials of all kinds have been found in the Rossysky Gosudarstvennyy Voenno-istorichesky Arkhiv (The Russian State Military Historical Archive, Moscow) and the Gosudarstvennyy Arkhiv Rossyskoi Federatsii (The State Archive of the Russian Federation, Moscow). Published official documents and personal papers range from military regulations and hospital statistics,⁶ which have never been used to such an extent before, to letters and diaries of those directly involved in the conflict.⁷ These new archival materials have allowed us to look once again at the army medical service during the Crimean War, to try to find out the cause of the large number of deaths from different diseases, and to determine whether they were avoidable. To answer these

⁴ B. S. Kruchek-Golubev and N. I. Kul'bin, 'Istorichesky ocherk razvitiya i deyatelnosti voenno-meditsinskogo vedomstva v tsarstvovanie imperatora Nicholas I', in *Stoletie Voennogo Ministerstva*, VIII (1908), no. 2, VIII (1909), no. 3; N. I. Solov'ev and N. Stefanovsky, *Ocherki sanitarnogo sostoyaniya Kruimskoi armii v kampaniyu 1854–1856 gg.* (Moscow: [n. pub.], 1872), I, III; N. I. Solov'ev, 'O perevyazochnuikh punktakh Sevastopolya', *Russky vestnik*, 99 (1872), no. 6, 838–56; N. I. Solov'ev, 'Skorbnuie listui Kruimskoi kampanii', *Russky vestnik*, 101 (1872), no. 9, 297–371.

⁵ A. V. Kukharchuk, 'Deistvuyushchaya armiya v voennuikh preobrazovaniyakh pravitel'stva Nicholas I' (unpublished doctoral thesis, Moscow State University, 1999); A. V. Kukharchuk, 'Mnimuy bol'noi: Buila li bessil'na nikolaevskaya armiya?', *Rodina*, 3–4 (1995), 22–26; M. M. Shevchenko, *Konets odnogo velichiya: Vlast', obrazovanie i pechatnoe slovo v Imperatorskoi Rossii na poroge osvoboditelnykh reform* (Moscow: Tri Kvadrata, 2003), pp. 185–94; Y. A. Naumova, *Ranenie, bolezni i smert': Russkaya meditsinskaya sluzhba v Kruimskuyu voynu, 1853–1856* (Moscow: Modest Kolerov, 2010); A. A. Krivopalov, 'Fel'dmarshal I. F. Paskevich i russkaya strategiya v 1848–1856 gg.' (unpublished doctoral thesis, Moscow State University, 2014).

⁶ N. Ya. Chernobaev, 'Obzor boleznei gospodstvovavshikh v voiskakh i gospi-tal-yakh Yuzhnoi armii s 1/11/1853 po 1/11/1854 g.', *Voenno-meditsinsky zhurnal*, 65 (1855); *O predokhraneniï soldat ot kholerui i o podaniï pervoi pomoshchi zabo-levayushchim ee* (St Petersburg: [n. pub.], 1847); N. G. Shreiber, 'Obzor boleznei, gospodstvovavshikh v voiskakh 4-go pekhotnogo korpusa v 1853 godu', *Voenno-meditsinsky zhurnal*, 63 (1854).

⁷ N. V. Berg, *Zapiski ob osade Sevastopolya*, 2 vols (Moscow: Izdatel'stvo Soldatenkova i Shchepkina, 1858); A. G. Lebedintsev, *Iz dnevnika soyashchennika v osazhdennom Sevastopole 1854–1855* (Moscow: Sinodal'naya Tip., 1908); N. I. Pirogov, *Sevastopol'skie pis'ma N. I. Pirogova. 1854–1855 gg.* (St Petersburg: Tip. Stasyulevicha, 1899).

questions it is crucial to compare medical provision in all three major Russian theatres of operations during the war of 1853 to 1856 — the Danube, the Caucasus, and the Crimea — something that Russian historiography still lacks.

Russia's medical community on the eve of the Crimean War was part of the European scientific mainstream and was able to take cognizance of the latter's latest achievements. The same was true for the Russian military medical service, which at the outset of the nineteenth century — thanks to the restless energy of Y. W. Willie, probably the most famous Scotsman in Russian state employ — was entirely restructured and received its own independent administration. Willie held the leading position in Russia's military medical service for almost half a century, both as Chief Military Medical Inspector of the Russian Army and Director of the Medical Department of the Ministry of War. During this time he completely transformed the Russian military medical service.

Subsequently, the development of military medicine in Russia and its remarkably high achievements are mainly credited to the work of N. I. Pirogov, Doctor of Medicine and Professor of the Medical Surgical Academy in St Petersburg. His scientific legacy, which remains intact, made him a legend during his lifetime and after his death confirmed his fame as the founder of the Russian Military Field Surgery and Military Sanitary Administration.⁸

Nevertheless, despite great improvements, Russian military medicine, along with its European counterparts, remained relatively primitive and could not keep pace with the demands of its armed forces. Medical practices introduced into the Russian forces during the first half of the nineteenth century were chiefly based on homeopathic treatment and could only contain, but never eradicate, epidemic diseases among the troops. Russian doctors openly admitted their almost total powerlessness in the face of such diseases as cholera and plague, which normally brought death to half of those who contracted them. The efficacy of military medical science was undermined by a lack of proper anaesthesia and immobilization, and the absence of aseptics and antiseptics. Before 1853 only a few medical practitioners had started using plaster dressings and either chloroform or ether as an anaesthetic agent, while the majority viewed these advances with suspicion and as unhealthy and risky experiments. So it comes as no surprise to us that in the first half of the nineteenth century between sixty and eighty per cent of patients died because of gangrene (as a result of sepsis) while soldiers with gunshot wounds were in most cases offered only one solution — amputation (followed by a high risk of death).

Ever since the Napoleonic wars the military medical authorities preferred to avoid treatment on the battlefield in favour of medical evacuation

⁸ A. S. Georgievsky, *Istoriya voennoi meditsinui* (Leningrad: [n. pub.], 1982), p. 17.

so that soldiers could receive better care at the rear hospitals. This system was improved and developed further over the next forty years. New regulations in the 1820s and 1830s created a highly developed network of general military hospitals, station sick quarters, and field hospitals. The last were the system's most advanced innovation. These mobile units could be opened very quickly at the request of Army Headquarters and be positioned in whichever theatre of operations best suited war strategy. They were based on special medical supplies provided by the Department of Army Supply (or Commissariat Department) and kept in reserve during peacetime either within general military hospitals or army warehouses. The most difficult question was how many such mobile units one needed to prepare. An answer was provided by the regulation of 9 February 1812, which concluded that one in ten of military personnel succumb to injuries and sickness during a European war and one in seven during a conflict fought in Asia. Based on this assumption the Commissariat Department calculated the medical support necessary in case of war. We know that by 1853 there were fifty-three field hospitals capable of providing medical treatment for 15,000 soldiers, and that in response to a decree of 28 February 1850 a stock of hospital supplies for 165 officers and 12,000 other ranks was to be kept in army warehouses close to the Russian Empire's borders.⁹

Immediately after the Crimean War these regulations came under severe criticism from members of the public, who blamed the Russian military system for its lack of sufficient medical facilities. Yet the military administration did not see anything wrong with its calculations and thought the number of mobile units available more than enough to provide timely and efficient medical care. Perhaps the problem arose because in 1836 the army's warehouses were asked not to amass extra hospital supplies, as it might be difficult to prevent them ceasing to be useful before war came.¹⁰ The same logic applied to the arranging of extra medical supplies at military hospitals. It was felt that these were better used rather than kept in stock, and that hospital administrators could quickly replace them upon request when needed. This meant that the Medical and Commissariat departments ordered the bulk of medical supplies after general mobilization was declared. At the same time the new system allowed the purchase of a certain quantity of medical supplies in the theatre of operations itself.¹¹

Another problem was the modernization of the army medical service which unfolded as part of Tsar Nicholas I's ambitious programme of military reform. This, while significantly improving the Russian central military

⁹ *Polnoe Sobranie Zakonov Rossyskoi Imperii (PSZRI)*, 2nd ser., 55 vols (St Petersburg: Tip. II Otdeleniya Sobstvennoi Ego Imperatorskogo Velichestva Kantselyarii, 1830–84), xxvi (1852), no. 24934, 121–22.

¹⁰ *PSZRI*, 2nd ser., xi (1837), no. 9038, 284.

¹¹ *PSZRI*, 2nd ser., xi (1837), no. 20670, 197.

administration, unfortunately did not work so well for the medical service. After 1836 it found itself governed by four departments and two different ministries, an unwieldy state of affairs not redeemed by the military administration's admission that it found the most convenient way to keep order was when 'each department is solely responsible for only one part of the military administration'.¹²

The Crimean War started in 1853 with the Russian occupation of the Danubian principalities, followed by the first skirmishes in the Caucasus. Both regions had a notorious medico-topographic reputation and were well known to the Russian military command. Because of the high disease and mortality rate along the Danube, the occupation there was planned with special care. For the first time in Russian history the military hospitals were deployed to the areas where the largest numbers of sick and wounded were expected rather than, as before, where they happened to be.

On 21 June 1853 the Russian Danube Army, comprising the 4th and 5th Corps under Prince M. D. Gorchakov, crossed the River Pruth. The army of approximately 90,000 men was provided with medical supplies sufficient for only 7,400, violating the regulation of 1812. This underprovision can be explained by the nature of the Russian Balkan campaign. Tsar Nicholas I did not expect prolonged conflict in this theatre of operations and saw the occupation chiefly as a peaceful procession. But things changed once the Ottoman Porte declared war on the Russian Empire. The same day Russian forces in the principalities were augmented by the 3rd Corps, which arrived at the Danube headquarters bringing with it additional medical supplies. The army's chief doctor was replaced by a more experienced officer and a cordon sanitaire was set up along the Russo-Turkish border to prevent the spread of plague. As a result, medical inspections did not note any problems with the army's health; statistics showed that disease and mortality rates during the first half of the Balkan campaign did not exceed those seen during peacetime. Although by the provisions of the regulation of 1812 the army on the Danube remained short of medical supplies, even what was available remained unused in its entirety.

The tempo of the war changed completely after February 1854, once Britain and France broke diplomatic relations with Russia. In response, the Russians crossed the Danube and besieged the Ottoman fortress town of Silistra. This prompted an energetic response from the Army Medical Department, which prepared to deploy around fifty-nine field hospitals for the 20,550 people of the Danube Army. While the first twelve mobile hospitals for 3,450 people formed in Kiev did not make it to the principalities at all, the remaining forty-seven field hospitals for 17,100 people and four sick-carriages with medical supplies for 1,200 people each were sent to the

¹² N. A. Danilov, 'Istorichesky ocherk razvitiya voennogo upravleniya v Rossii', in *Stoletie Voennogo Ministerstva*, 1 (1902), 334.

Danube area at the beginning of 1854. In addition, huge medical stockpiles for 13,000 people were formed at the nearby Russian fortresses of Izmail, Galatsi, and Brailov (Zaionchkovsky, 11, 764, 763). The last measure proved to be excessive. The hospital equipment was returned from the border practically unpacked and was moved to Kherson's military warehouse as a special medical reserve for the Danube Army after the withdrawal of Russian troops from the principalities.¹³

Fearing a repeat of the medical disasters seen during previous military campaigns in the Balkans, the Russian military command, in short order, provided the Danube Army with the medical backing for 34,750 soldiers: that is, sufficient for every fifth man. These calculations proved accurate. Medical statistics confirm that the medical condition of military personnel was quite satisfactory and no substantial increase in disease and death rates was noted in comparison with the peacetime period: of 194,675 sick and wounded during the campaign on the Danube only 13,947 died, the best outcome of the Russian military medical service's endeavours during the whole Crimean War.¹⁴ The highest death rate was in the general military hospitals, which, according to Chief Doctor N. Ya. Chernobaev, did not represent anything unusual ('Obzor boleznei', p. 125). A slight increase in numbers of sick men appeared there only at the end of Danube campaign, which was also believed by the military medical administration to be in the natural way of things. As Director of the Medical Department V. V. Pelikan put it:

It has been empirically proved that epidemic diseases are not as notoriously well spread during the military actions as when troops are withdrawn to their permanent base. This was evident in all previous conflicts, but most notably during the last war with the rebellious Hungarians, which caused great illness and mortality among our troops returned from Hungary.¹⁵

After Russian troops crossed the Pruth, the Ottoman Porte mobilized in the Caucasus. Here, Russian forces were scanty and it was with great difficulty that an Active Corps on the Russo-Turkish border (the so-called Caucasian Active Corps) was formed at the end of 1853 to confront the Turks. The Corps under Prince V. O. Bebutov had around thirty-thousand men, who were supplied with medical means for every fifth man, as with Gorchakov's

¹³ Moscow, Rossysky Gosudarstvennyy Voенno-istorichesky Arkhiv (RGVIA), f. 879, op. 2, d. 232, fol. 11.

¹⁴ N. Ya. Chernobaev, 'Godovaya vedomost' o chisle bol'nuikh voinskikh chinov v voennuikh gosptalyakh, sformirovannuikh dlya voisk Yuzhnoi armii, ravno v gosptalyakh postoyanuikh v raione etikh voisk nakhodyashchikhsya, s 1/11/1853 po 1/11/1854 g.', *Voенno-meditsinsky zhurnal*, 70 (1857), 10–17.

¹⁵ RGVIA, f. 879, op. 2, d. 971, fol. 2.

army when it crossed the Danube. Once again the Russian government made a special effort to provide this medically challenging theatre of operations with extra supplies, exceeding those demanded by official regulations. The same type of quarantine cordon seen on the Danube was also set up along the border to prevent the plague epidemics which medical officials considered the 'constant companion of any war with Turkey'.¹⁶ And, as on the Danube, the region remained free from an outbreak of the plague for the first time since the Russo-Turkish wars of the eighteenth century.

During three years of war in the Caucasus the military command had to organize medical care in the most taxing of conditions, constantly facing a steady stream of casualties, a challenging climate, and a lack of medical personnel and proper hospital buildings. Yet there is nothing out of the ordinary in the available hospital statistics for these years. Death and disease rates among the Active Corps stayed close to those seen during the Balkan campaign, which could be considered a noteworthy achievement.

This would not have been possible without competent work by the military command which showed itself in possession of a good understanding of the theatre of operations and its challenges. Constantly outnumbered by Turkish troops, the Caucasus Army command needed to adjust its tactics accordingly. During one of the key battles in 1853, Commander-in-Chief Bebutov decided to compensate for the paucity of Russian troops by increased activity and a resolute holding of the line. To match the medical service to the newly chosen tactics, Chief Doctor K. A. Popov was ordered to set up only one dressing station a short distance from the battlefield, which was to follow any movements of the troops. By this means he reduced the time required for carrying wounded soldiers by stretcher-bearers (who were soldiers drawn from the ranks) ensuring that the latter were not absent from the battlefield for so long. To keep as many soldiers in the line as possible he also despatched three medics under his immediate command to treat the slightly wounded on the battlefield. This brought brilliant results. Popov reported to St Petersburg that 'lightly wounded soldiers eagerly returned to the ranks and there were occasions when the twice wounded came back to the battlefield'.¹⁷ At the same time the field dressing station itself operated much more efficiently because it was only engaged in the treatment of the critically wounded. Thanks to such sensible administration and the good understanding between the military and medical command, all the wounded in the battle were 'accommodated and comforted' by the end of the day and fully evaluated and operated upon during the next twenty-four hours. Popov proudly mentioned in his report that in spite of constant relocation of the dressing station forty-two surgical operations were performed there.

¹⁶ RGVIA, f. 879, op. 2, d. 930, fols 1–2.

¹⁷ RGVIA, f. 879, op. 2, d. 933, ch. 1, fol. 42.

In addition, many medical officials believed that they owed the positive results achieved in the medical treatment on the Caucasus battlefield to the high morale of the troops. The Active Corps was the only one where the Russians saw the prospect of victory. Some men were so animated by martial spirit that when injured they refused to proceed to the dressing stations, preferring instead to remain in the ranks and carry on fighting.

At the beginning of the Crimean conflict the Russian Ministry of War was ready to take care of its wounded and sick servicemen according to regulations mainly based on the experience of the Napoleonic wars. However, the heavy death toll exacted by sickness during previous Russo-Turkish wars in the first half of the nineteenth century led to a thorough re-evaluation of medical policy during the Crimean War which, of course, began as another war against the Turks. The military command was able to marshal medical supplies for its Danube and Caucasus armies one and a half times the amount required by regulations, which warded off the excessive death rates and prolonged outbreaks of disease normally seen there. But a completely different picture appears when we turn to the Crimean campaign.

At the time of the allied landing in Eupatoria, Russia had only 52,000 men in Crimea, which would form the basis of the Russian Crimean Army under the command of Prince A. S. Menshikov. His local supplies were barely sufficient to meet peacetime medical requirements. Over and above this, replenishing the Crimean peninsula was a logistical nightmare. Only one road (running through Simferopol) linked its chief naval base Sebastopol with the mainland and it tended to be barely passable during winter. One of Sebastopol's defenders compared the Crimea to an 'uninhabitable desert, where like in Africa one needs to bring one's own bread in order not to die from starvation: locals will not sell you anything'.¹⁸

Although Commander-in-Chief Menshikov had received warnings about a planned invasion of Crimea he did little to prepare his troops. The outcome was disastrous. The existing hospitals in the Crimea turned out to be completely unready to admit about two thousand wounded soldiers who streamed back to Sebastopol after the Battle of Alma in September 1854. Only the efficiency of the naval authorities helped to restore a semblance of order to medical provision in the city two days after the battle, but they could not compensate for the gross lack of medical supplies. Military and medical administration in the Crimea took everything it could from the region, but local supplies were obviously not enough for such a large-scale conflict. This constant lack of medical means could easily have been rectified if the Russian Supreme Command had decided to channel its medical resources to the area in September 1854, but Tsar Nicholas I had other things to worry about.

¹⁸ P. I. Stepanov, 'Sevastopol'skie zapiski 1854, 1855 i 1856 godov', *Voennuy sbornik*, 4 (1905), 43-54 (p. 44).

On the eve of the Sebastopol campaign the Russian armed forces were stretched across the Empire's extensive frontiers. The main bulk of the troops, the so-called Active Army, was stationed in the Kingdom of Poland and the adjoining Russian western provinces guarding against the Austrian and Prussian threat. This army of almost a quarter of a million men was headed by Prince I. F. Paskevich, Tsar Nicholas's closest associate, and comprised mainly the 1st, 2nd, and Grenadier Corps, the best elements of the entire Russian army. During 1853 and 1854 the Russian Supreme Command considered Poland the most strategically important among potential theatres of operations, not the Crimea. In contrast, the Crimean peninsula, almost entirely surrounded by the sea and with only tenuous transport links with the mainland, appeared in the eyes of the military command as simply a strategic trap.¹⁹ Nevertheless, the Russian western provinces, especially the Kingdom of Poland, proved to have very unhealthy climatic conditions and the area traditionally had one of the highest death rates in the Empire. The biggest problems were the epidemics of typhus and typhoid fever that raged equally among troops in garrison and civilians. Paskevich wrote a report about some small villages losing a quarter of their population to typhus during a single year: no 'previous epidemics ever caused such great damage before'.²⁰ So, quite naturally, the Commissariat Department tended to direct all available supplies, including medical equipment, to Paskevich's army, trying to provide the essential minimum required by the regulation of 1812. This policy was maintained even after war shifted to the Crimea in the autumn of 1854. Despite a gross lack of medical care in the Crimea the Commissariat Department applied all available resources to the Active Army first. Nevertheless, these extra measures did not prevent excessive morbidity among soldiers stationed in the Kingdom of Poland. Thus the army, which did not fire a shot during three years of war, lost one third of its number — almost the same as the army in the Crimea.

After Sebastopol withstood its first bombardment in October 1854, both sides prepared for siege warfare. Only then did the Minister of War order a build-up of medical stock for the Crimean theatre of operations. This took months of work and in the meantime medical supplies sent to the peninsula arrived in a haphazard fashion, coming from different military warehouses and accompanied by severe delays and disruptions. Ironically, plenty of spare resources were available at the former Danube Army, later renamed the Southern Army, which was stationed in the Russian southwest. Its main role was to protect Russia's southern territories against Austrian invasion. M. D. Gorchakov, its commander-in-chief, held under

¹⁹ A. A. Krivopalov, 'Fel'dmarshal I. F. Paskevich i problema strategii Rossii v Vostochnoi voine 1853–1856 gg.', *Russky sbornik: Issledovaniya po istorii Rossii*, 7 (2009), 238–72.

²⁰ RGVIA, f. 879, op. 2, d. 949, fols 5–8.

his hand vast supplies originally earmarked for the Danube Army, and on top of this he could commandeer whatever he needed from no fewer than seven Russian provinces and the entire Bessarabian region. This was more than enough for Gorchakov's forces, especially after practically all of the 4th Corps was transferred to the Crimea to strengthen Menshikov's army in October 1854. Anticipating that the Crimean Army would experience supply shortages, Gorchakov wrote to Menshikov more than once offering his help. But the latter, still counting on resources from the Ministry of War, was very reluctant to accept Gorchakov's offer. As the author of an article in *Istorichesky vestnik* remarked:

It seems that Menshikov began to compare the Commander-in-Chief of the Danube Army, who possessed the huge resources required to wage an active military campaign, to himself, the Commander-in-Chief of the Crimean Army, whose appointment to command was adventitious and who possessed next to nothing. Any offer of help from Gorchakov was considered by Menshikov as an attempt at interference, which he took as an insult.²¹

The Battle of Inkerman in November 1854 resulted in 6,922 soldiers wounded and shell-shocked on the Russian side (Kul'bin, p. 80). This caused a complete collapse of the medical service in the Crimea, which was still reliant on local supplies and was unable to keep up with the demands of siege warfare. The lack of medical resources was catastrophic. When Professor N. I. Pirogov arrived in Sebastopol eighteen days later he still found 'around 2,000 wounded, packed together, lying on dirty mats', and for the next ten days he 'had to operate on those who should have been operated upon straight after the battle' (Pirogov, pp. 17–18). The gruesome images of suffering soldiers have haunted the Russian public imagination ever since. The immediate impact was that a great number of volunteers joined the Russian medical service, among them some of the best qualified medical professionals of the time and the first Russian female nurses, while a firm stream of donations did not cease to flow in until the last days of the war.

Gradual improvements in the supply system and the huge resources coming from private hands helped to eliminate the most egregious deficiencies of the Crimean medical service by the end of the winter of 1854 and 1855, but they still could not remedy the lack of hospitals and medical supplies. Any large-scale field battle or massive bombardment threatened another tragedy on a par with Inkerman. Pirogov warned the medical authorities that 'if nothing is changed by the spring we will see typhus or

²¹ N. V. Isakov, 'Iz zapisok N. V. Isakova', *Istorichesky vestnik*, 8 (1915), 413–45 (p. 418).

worse arising because of an influx of wounded and chaos in their transportation' (p. 41). They were prophetic words.

Physical overstrain due to the hardships of siege warfare and poor medical care during the first six months of the Sebastopol campaign seriously damaged the Crimean forces' health and ability to resist disease. From the spring of 1855, medical personnel began noticing sporadic epidemics of typhus and typhoid fever, first in the Crimean Army and then the Southern Army (which was eventually amalgamated with the Crimean forces). The situation took a turn for the worse after volunteer militia forces joined the armies in autumn 1855, after which the typhus epidemic spiralled out of control.

It seemed that nothing could improve the appalling medical condition of the Crimean Army. In March 1855 Gorchakov had arrived in the peninsula as the new commander-in-chief, bringing with him almost all his Southern Army and its abundant resources. Thanks to his active measures, by December 1855 the 150,000-strong Crimean Army was provided with about seventy-two thousand hospital beds (Bogdanovich, iv, 177). Entire cities were transformed into hospitals, but even these colossal efforts were not enough to prevent the outbreak of epidemics among the troops. Typhus reached its peak during the winter of 1855 and 1856, by which time the guns had largely ceased firing and the peacemakers were trying to bring the Crimean War to an end. In spite of an extensive programme of anti-epidemic measures, Russian medics had to admit their powerlessness and could only hope that the incidence of disease would abate of its own accord once better weather arrived. The number of incidents of typhus declined only in early spring 1856. As a result, perhaps surprisingly, the most considerable losses among Russian troops came at the end of the Sebastopol campaign.

During two years of war more than one-third of the Crimean and Southern armies died of wounds and disease. Medical statistics show that 822,025 sick and 83,773 wounded were admitted to military hospitals between September 1854 and May 1856, of whom, respectively, 134,542 and 15,971 died. The Crimean Army suffered more than others due both to the specific nature of the Crimean theatre, with its extremely poor resources and lines of communication, and the lack of care from Commander-in-Chief Menshikov, who failed to take precautionary measures in time. The picture is completely different if we look at the substantial force of 300,000 men deployed around the Baltic coastline to guard St Petersburg and the major bases of the Baltic Fleet. Here, during the winter of 1855 and 1856, medical conditions were more satisfactory and disease rates were closer to those of peacetime.

Russian historians often see the Sebastopol campaign as a forerunner of the two world wars of the twentieth century. The extensive medical resources of the army of Nicholas I could no longer guarantee success in

the treatment of its sick and wounded soldiers under the new conditions that prevailed. At the same time, the scale of medical resources mobilized clearly contradicts the widespread belief that the Russian Empire's military system was inadequate. During 1853 and 1854 the Ministry of War prepared medical supplies for 63,500 men rather than the 18,000 required by army regulations for forces of the Danube Army and Caucasus Active Corps. But Russian political isolation during the Crimean War forced her Supreme Military Command to fear invasion from land and sea across any number of the country's borders. The tough choices that confronted it demanded the cool and calculated allocation of supplies, a prompt response to the local needs of troops, and thoughtful consideration of the specific features of each theatre of operations. All in all, the Crimean War suggests the failings were not of the Russian military medical service's poor facilities but rather its slow mobilization rate — a flaw which might be exacerbated or ameliorated depending upon how capable the local military command proved to be.