

The Medical Crisis in the Crimean War was Resolved near the Front

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The historiography of the Crimean campaign of the British army in 1854–1856 has tended to concentrate on the disasters of the first winter and the perceived incompetence of the heads of department on the one hand, and on the other to overemphasize the worthwhile and commendable contributions made by the talented and well-connected Florence Nightingale and the experienced government-sponsored Sanitary Commissioners. Inevitably this has established an unbalanced view of what took place, and an assessment of primary sources has demonstrated that their contribution was probably much less than some would wish to think. Matters have been distorted further by commentators who have failed to consider events in strict order of occurrence and have indulged in the knowledge of hindsight. In consequence many aspects of this topic have been inaccurately portrayed in both academic works and popular culture.

This essay serves to redress the balance by providing an overview of the medical and surgical aspects of the campaign based principally on primary sources and thereby demonstrate that the principal problems that beset the army occurred when it was in Bulgaria and the Crimea, and not in the general hospitals in the Ottoman Empire such as Selimiye Barracks in Istanbul where Nightingale was based. And it was in the Crimea that matters were ultimately resolved.

The British Army had been ‘run-down’ since the Napoleonic War and it was under strength and relatively poorly equipped when war was declared, while the military infrastructure was more suited to defending the British Empire than fighting a European war.¹ The conduct of the war tended to follow 18th and early 19th century military principles in several respects: ‘Authority [was] concentrated in the commander and his small staff; [a system which proved] wholly unsuited to [...] operations [requiring] co-ordination between the different branches of the Army, as well as between the Army and Navy’.² On the other hand, use was made of modern technology including rifled muskets, steam-powered ships, an electric telegraph, a railway network,³ steam-powered saw mills, a floating bakery, and a factory ship.

The most comprehensive source of published statistical information on diseases and wounds and injuries during the 27-month period from April 1854 to June 1856 is an official two-volume report published as a parliamentary paper.⁴ The first volume provides a commentary of the health status for each of the fourteen cavalry and fifty-two infantry regiments, together with a summary table which summarizes for each the monthly number of admissions to the regimental hospital for, and deaths from, up to c.110 diseases and eight causes of wounds and injuries. Regretfully there is no comparable detailed information on the Royal Artillery and Royal Engineers. The second volume includes, inter alia, several summary tables that deal with the Army as a whole, of which General Return A is the most important in the context of this essay, together with tables for admissions and deaths in the nine general hospitals utilized during the campaign. Their location in the Ottoman Empire, including Bulgaria, and the Crimea are illustrated in Figures 1 and 2, with the months during which they were operational being summarized in Table 1.

The British Army

At the end of January 1855 Lord Raglan, who commanded the Army of the East as it was titled, pointed out to the Duke of Newcastle, the Minister for War, that the ‘the organization

of the British Army, which is framed for stationary service in the colonies, or for home duty, is undoubtedly defective for operations in the field'.⁵ How right he was. These shortcomings,

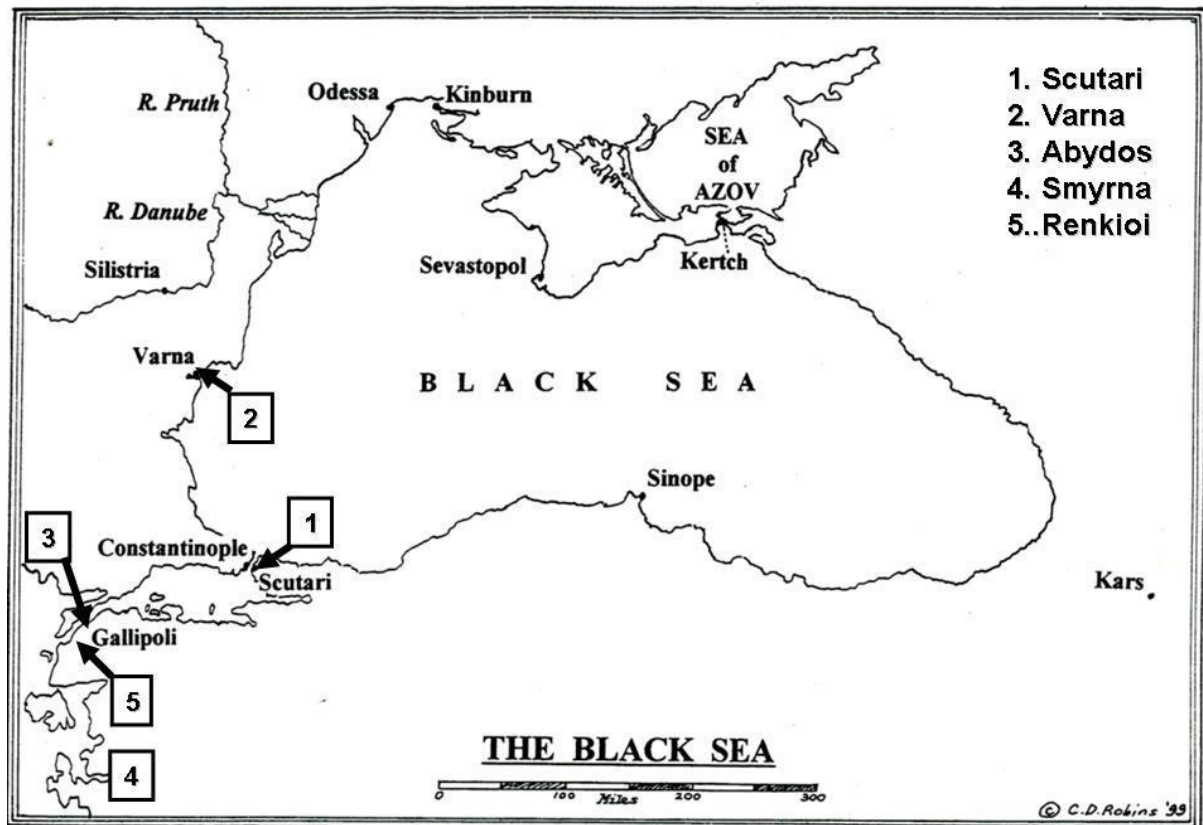


Figure 1: Location of the general hospitals in Turkey and Bulgaria

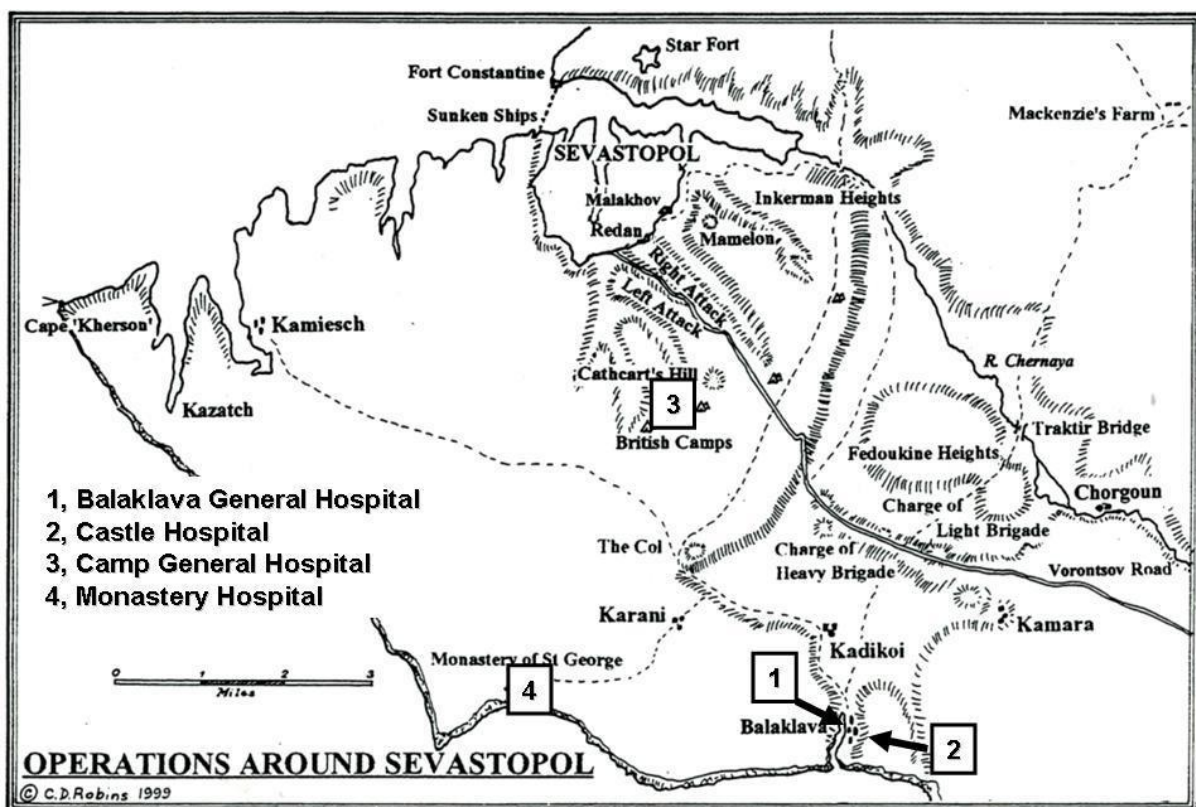


Figure 2: Location of the general hospitals in the Crimea

Table 1: The months during which the hospitals of the Army of the East were in operation, April 1854 – June 1856

Hospital*	1854		1854–55				1855–56					
	A–M	J–S	O–N	D–J	F	M	A–M	J–S	O–N	D–A	M	J
Regimental hospitals	•	•	•	•	•	•	•	•	•	•	•	•
I Scutari		•	•	•	•	•	•	•	•	•	•	•
II Varna		•	•	•								
III Balaklava General			•	•	•	•	•	•	•	•	•	•
IV Abydos				•	•	•	•	•				
V Smyrna					•	•	•	•	•			
VI Castle General						•	•	•	•	•	•	•
VII Camp General							•	•	•	•		
VIII Monastery								•	•	•	•	
IX Renkioi									•	•	•	•
Number operational	1	3	4	5	5	6	7	8	8	7	6	5

* Details of the hospitals of the cavalry and infantry regiments are included in House of Commons Parliamentary Papers, 1857–58, 1 while the tables for the general hospitals, designated 1–IX, form an appendix in the House of Commons Parliamentary Papers, 1857–58, 2.

coupled with a combination of limited harbour and storage facilities, bad weather, a lack of wheeled transport, and the deterioration of rudimentary rural roads, resulted in substantial difficulties in bringing the supplies, all of which had to be imported by sea, to the camps during the winter of 1854–55. This combination of circumstances, coupled with the effects of the loss of stores sustained during the storm of 14 November, together with the failure to make timely provision of adequate shelter, proved catastrophic. Collectively these oversights overwhelmed the limited resilience of the army supply system and thus contributed directly to the excessive losses from disease. While these difficulties did not lead to a strategic failure, they were disastrous enough, and it was only the tenacity of those on the ground that did much to rectify matters. Their perseverance, coupled with improvements in the roads, the rationalization of land transport, and particularly the construction of a railway network, ensured that the necessities for life were eventually brought to the camps on a regular basis, and the health of the troops improved considerably to give the ‘Victory over Disease’ in 1856 when the health of the army was deemed very good by the standards of the day.

Army Medical Department

The provision of health care for the Army of the East proved a prodigious undertaking. Inevitably it took time to increase the manpower in all branches of the medical services in a relatively short time, and for those employed to gain experience after a prolonged period of peace in Europe.⁶ Some medical officers would have served in India and at other foreign stations and this experience would not necessarily have equipped them adequately for campaigning in Europe. Another important issue facing Dr, later Sir John, Hall, the Principal Medical Officer, and his senior colleagues, was they had little or no executive authority. This was vested in the Commander of the Forces and implemented by the Adjutant General, Quartermaster General, and the officers commanding divisions, the Royal Artillery and Royal Engineers. As a consequence they had little opportunity to influence events as they were not involved routinely in the planning of the activities of the army, both military and domestic. Inevitably this resulted in the Army Medical Department being ill-prepared on occasions for what was expected, and for which they got unreasonably criticised by politicians, the military authorities and the press.

A shortage of army medical officers resulted in the employment of number of civilian surgeons; a political initiative introduced when matters were pressing. It proved a controversial policy and it caused resentment because the conditions of service for the civilians were better, particularly with respect to pay. The employment of both civilian doctors and female nurses was, in John Shepherd's opinion, a failed 'experiment' [...] as it neither relieved 'the situation in the Crimea' nor promoted 'a closer liaison between the army medical services and the civilian doctors'. However, he concluded that overall 'much good came out of it' since the 'evolution, in time, of the territorial army medical officer and the Royal Navy Volunteer Reserve (now RNR) medical officer who have supported the regular services in times of war may be thought to have stemmed from this Crimean interlude'.⁷

Hospital facilities

It was incumbent on the military authorities to provide the hospitals, both regimental and general, and not the Army Medical Department which was responsible for the medical and surgical care of the patients. There was a serious lack of adequate hospital facilities during the first few months after the invasion but as the siege progressed stationary regimental hospitals were developed and these became the preferred location for providing primary health care and treating men wounded in action. General hospitals catering for different categories of patient were also opened; one near the Genoese castle where the wounded could convalesce in March 1854, and during the following month one in camp to cater for battlefield injuries. These developments resulted in a reduction in the need to evacuate patients with a poor prognosis to Turkey and from the end of January 1855 the majority of evacuees would then have been convalescents or not suffering life-threatening afflictions.⁸

Transportation and evacuation

Many of the problems associated with the transport of the sick and wounded, either on land or at sea, resulted from the failure of the government and the military authorities to develop a comprehensive plan for this crucial activity.⁹ There was thus no advanced commissioning of either a suitably equipped and manned Ambulance Corps or ships dedicated for use as hospital transports or floating hospitals. The furnishing of adequate ambulance transport proved a problem for much of the campaign and it was only near the end of 1855 when the Ambulance Corps was fully equipped.¹⁰ Nevertheless, the provision for battlefield injuries was developed during the course of the campaign, as is summarized in Table 2.

The transfer of patients from the camps to the port of Balaklava took place almost daily and on occasions the lack of suitable transport caused considerable difficulties for the Army Medical Department who had to rely on assistance from the French from time to time. Inevitably there were some local failures in communications which resulted in hardship for the patients. Matters improved during the spring of 1855 with the repairing of the roads and the opening of the railway. The evacuees were selected by the regimental and divisional medical officers but it was the military authorities that were responsible for providing the transport from the camps to the port and the provision of the orderlies to accompany the patients on the voyage, and maintain discipline. The medical officers were nominated by the Principal Medical Officer, and his department was responsible for the supply of medical equipment and consumables. The merchant ships employed were selected by the Royal Navy. This was done on an ad hoc basis during the first three months of the campaign and inevitably many would have been less than satisfactory in terms of on-board facilities, equipment, and personnel. However, the service became more regular from mid-December 1854 when dedicated steamers began to provide a shuttle service across the Black Sea. This

arrangement proved generally satisfactory as there was little adverse comment, apart from occasional problems associated with either embarkation or disembarkation. Mortality during

Table 2: Management of men suffering battlefield injuries

	Battles		Siege operations		
	Alma 20 Sep. 1854	Balaklava 25 Oct. 1854	Inkerman 4 Nov. 1854	Redan 18 June 1855	Redan 9 Sep. 1855
<i>Location for treatment</i>					
Battlefield/front line	●	●	●	●	●
Casualty clearing stations	-	-	-	●	●
Regimental hospitals	-	●	●	●	●
General hospitals	-	?	●	●	●
<i>Transport for casualties</i>					
Stretchers	●	●	●	●	●
Ambulance waggons	-	?	●	●	●
Railway	-	-	-	●	●
Evacuation by sea	●	●	●	(●)	(●)

●, Utilized; (●), available if required.

Table 3: Number of hospital ships departing from the Crimea during different phases of the campaign, September 1854 – June 1856

Event	Dates	Total voyages	No. of evacuees	No. of deaths (%)
I After landing	17–20 Sept. 1854	3	1,094	70 (8.4)
II After the Alma	21–30 Sept.	8	2,582	341 (13.2)
III Before Sevastopol	1–13 Oct.	2	462	14 (3.0)
IV After Balaklava	14–31 Oct.‡	7	1,112	63 (5.7)
V After Inkerman	1–11 Nov. ‡	6	1,317	40 (3.0)
VI Winter Period 1*	12 Nov.–11 Dec.	9	1,537	220 (14.8)
VII Winter Period 2†	12 Dec.–16 Feb. 1855	42	7,826	583 (7.5)
VIII Spring and summer campaign	17 Feb.–17 Sep.	76	9,162	41 (0.4)
IX After the siege	18 Sep.–4 June 1856‡	34	3,792	12 (0.3)
Whole campaign		187	28,875	1,392 (4.8)

[Summarized from the House of Commons Parliamentary Papers 1857–58, 2:465–77]

* Up until the issuing of a General Order of 12 December 1854 which regulated the inspection of hospital transports.

† Up until a General Order of 16 February 1855 that authorized the issued of lime juice to all troops. (This date was chosen arbitrarily as evidence that conditions for the troops were improving in the Crimea; clearly the issuing of lime juice would not in itself have been responsible for reducing the mortality on the hospital ships.)

‡ There were no departures between 13–26 October, 1–6 November 1854, and 18–26 September 1855 respectively.

the voyage to Turkey was greatest during the first weeks following the invasion when many of the invalids were either severely wounded or suffering from cholera, or both. The death rate started to decrease after the turn of the year confirming improvements in the management of patients on shore and afloat, and the need to send patients with a poor prognosis to Scutari (Üsküdar) becoming less necessary. From mid-February 1855 until the end of the campaign there were only 53 (0.4 per cent) deaths among the 12,954 patients evacuated, thus providing evidence that during this time most evacuees would have been convalescents (Table 3).

Diseases

Cholera, diseases of the bowels, and fevers were the most important causes of death from disease and these are discussed *in extenso* in the official history,¹¹ though ignorance of their aetiology, and hence the potential for rational approaches to their control necessarily limits the value of these contemporary accounts. Nevertheless, the importance of having a source of

clean fresh water and the maintenance of hygienic standards in the camps was appreciated, as was the detrimental influence of over-work and the failure to provide adequate rations and fuel, and suitable clothing and accommodation.

Twenty diseases that accounted for nearly ninety-five per cent of hospital admissions are listed in Table 4. Diarrhoea and continued fever, which was most probably typhoid, accounted for nearly half (31 and 17.5 per cent) while cholera, diarrhoea, continued fever, and dysentery were responsible for four fifths of the deaths, viz. 27.7, 22.4, 17.1, and 13.9 per cent respectively. Ailments which were associated with low mortality included: catarrh, abscesses, rheumatism (aches and pains in the muscles and joints), venereal diseases, intermittent fever, colic, sore throat, and jaundice. On the other hand, the case fatality rate was high in patients with remittent fever, frostbite, and typhus at 10.5, 19.3 and 34.4 per cent respectively. There were several other diseases not listed in Table 4 that occurred infrequently (<0.5 per cent of admissions) but had a high case fatality rate: apoplexy (80.5 per cent), tetanus (80), pulmonary tuberculosis (41.5), enteritis, gastritis, and peritonitis (34.5), heart disease (22), dropsy (21.5), and smallpox (21). To this list can be added two potential nosocomial (hospital acquired) infections – erysipelas (27), now known to be caused by *Streptococcus pyogenes*, and gangrene (25). Their infrequent occurrence strongly suggests that there was never an epidemic of fatal wound infections despite the difficult conditions experienced in many of the regimental and general hospitals.

Cholera: The conflict took place during a worldwide pandemic that lasted from 1846 to 1860. At the time the medical profession generally did not appreciate the crucial role of polluted water in its spread; though it had been recognized for over twenty years that the movement of people facilitated the transfer of the disease from place to place.¹² It is not surprising, therefore, that cholera followed the allied armies eastwards from Europe where it was widespread; and ‘visited’ Piraeus, Gallipoli, and the Bosphorus. The ‘pestilence’ was probably introduced into Bulgaria by French troops, with the first fatal case in the British troops occurring on 17 June 1854.¹³ The British public was informed by *The Times* on 17 July with a despatch from Bulgaria dated 21 June. The first epidemic lasted from June until December 1854 when the Army was in Bulgaria, and then after mid-September in the Crimea. There was then a lull for several months before it reappeared in May 1855 until after fall of Sevastopol in September. Fortunately cholera did not cause a third epidemic in 1856 (Figure 3).¹⁴

Gastrointestinal disorders other than cholera: Diarrhoea, and to a lesser extent dysentery, dominated the sick lists for most months from mid-summer 1854 until the fall of Sevastopol in September 1855. There were two major peaks in their incidence; during the winter of 1854–55 and the summer of 1855, though it was only during the first winter that they were associated with high mortality (Figure 4).¹⁵

Fevers: The diagnosis of the fevers was based solely on clinical observation, and since fever is a symptom of many illnesses, the data must be considered with a degree of caution. Common continued fever, probably typhoid, which had bedevilled campaigns in the past proved particularly troublesome during the winter of 1854–55 accounted for 80 per cent of fever cases. The others were intermittent fever, remittent fever, and typhus; and though they were all in the top twenty diagnoses listed in Table 4 they only accounted for 4.4 per cent of the admissions.

Scurvy (*scorbutus*): This was a feature of the first winter between December and April, with the first cases being diagnosed during October 1854. Lime juice was available to treat clinical cases but it was not until February 1855 that sufficient supplies had been procured for it to be issued prophylactically to all the troops. This policy continued for the rest of the campaign, and though cases continued to occur sporadically, they were only two deaths from May 1855 onwards.

Table 4: Twenty most common reasons for the admission of NCOs and men into hospital for disease, April 1854 – June 1856

Condition	Total admissions (% of 142,621 admissions)	Total deaths (% of 1,761 deaths)	Ratio of deaths:admissions (%) [c3/c2 x 100]
Diarrhoea	44,164 (31.0)	3,651 (22.4)	8.3
Continued fever	25,013 (17.5)	2,790 (17.1)	11.2
Catarrh	10,083 (7.1)	240 (1.5)	2.4
Dysentery	8,278 (5.8)	2,259 (13.9)	27.3
Abscesses	7,922 (5.6)	23 (0.1)	0.3
Cholera	7,574 (5.3)	4,512 (27.7)	59.6
Rheumatism	4,906 (3.4)	132 (0.8)	2.7
Ulcers	4,090 (2.9)	11 (0.1)	0.3
Eye diseases	3,307 (2.3)	0	0
Venereal diseases	2,959 (2.1)	3 (<0.1)	0.1
Remittent fever	2,957 (2.1)	311 (1.9)	10.5
Intermittent fever	2,406 (1.7)	60 (0.4)	2.5
Frostbite (<i>gelatio</i>)	2,398 (1.7)	463 (2.8)	19.3
Scurvy (<i>scorbutus</i>)	2,096 (1.5)	178 (1.1)	8.5
Colic	1,514 (1.1)	5 (<0.1)	0.3
Bronchitis	1,111 (0.8)	103 (0.6)	9.3
Sore throat (<i>cynanche</i>)	924 (0.6)	9 (0.1)	1.0
Dyspepsia	906 (0.6)	2 (<0.1)	0.2
Jaundice (<i>icterus</i>)	878 (0.6)	22 (0.1)	2.5
Typhus	828 (0.6)	285 (1.7)	34.4
All other 93 conditions	8,307 (5.8)	1,238 (7.6)	14.9
Totals for disease	142,621	16297	11.5
Wounds & injuries*	18,279	1,761	9.5
Punishment (Punitis)*	1,773	0	0

[Adapted from the House of Commons Parliamentary Paper 1857-58, 2, General Return A]

* Included by way of comparison.

Frostbite (*gelatio*): This was a problem when the troops spent long hours in the trenches during the first winter, and it was probably more akin to trench foot which proved troublesome on the Western Front during the First World War. Frostbite was also diagnosed during the second winter but this was principally associated with the exposure of the tissues to freezing temperatures, rather than the ‘protracted application of cold and wet’.

The pattern of disease changed month by month with the fatal illnesses experienced during the first winter being superseded by less life-threatening maladies during the second. Nevertheless, the trends in their incidence tended to follow a generally predictable pattern. It was the large number of cases and the high fatality rate that made them exceptional. A point that was made effectively in the official history: ‘Nearly all the diseases [...] were of a kind more or less incidental to troops employed on active service in the field, and familiar to the conditions of camp life. [The occurrence] of fevers and fluxes [...] was merely remarkable for the amazing prevalence and mortality which, for a considerable period, they obtained’.¹⁶

Bell concluded in a BBC broadcast that: ‘Infections are the true beneficiaries of war’ as ‘history has repeatedly shown that contagion makes an easy bedfellow with human conflict’ and hence: ‘war and insurgency provide the ideal conditions for bacteria and viruses to take a foothold’.¹⁷ For example typhus in the Thirty Years War (1618–48) and Napoleonic War (1804–15), and smallpox in the Franco-Prussian War (1870–71). On the other hand, Harriet Martineau, a prominent contemporary sociologists and commentator, pointed out that:

‘Disease from exposure, fatigue, and want, is more fatal than shot, shell, and bayonet’ and it is only when ‘disease arrives in the form of epidemics, the troops in fact sustain at once the

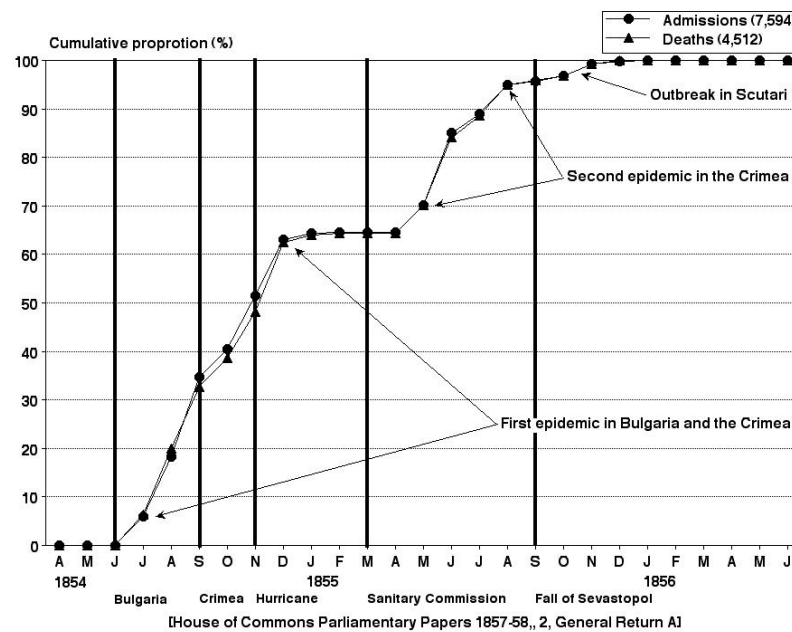


Figure 3: Admissions and deaths due to cholera among NCOs and men, April 1854 – June 1856

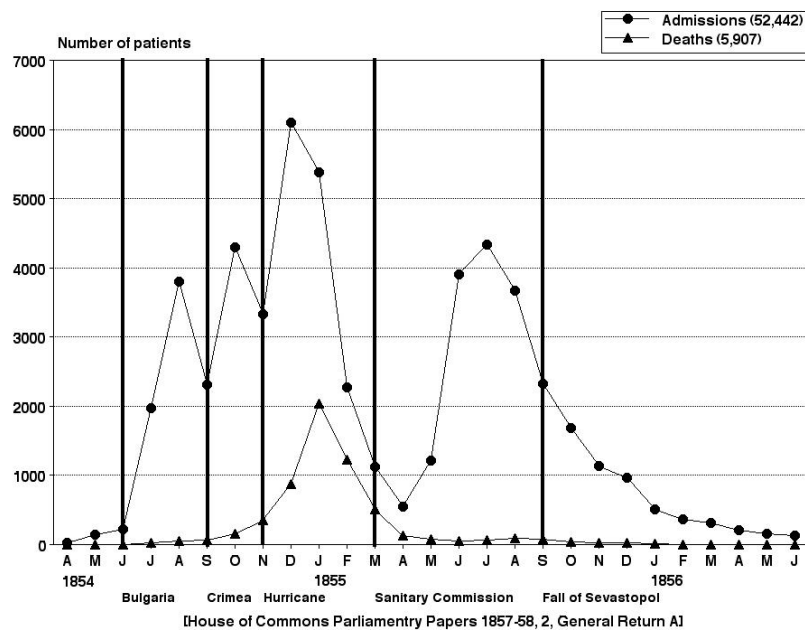


Figure 4: Admissions and deaths due to diarrhoea and dysentery among NCOs and men, April 1854 – July 1856

horrors of war and pestilence, and the two evils should not be mixed up together and laid at the door of war’.¹⁸ Similarly, Cooter questioned whether a ‘fatal partnership’ between pathogens and war should be assumed, and suggested that ‘many, perhaps most, epidemics are not rooted in war’. Certainly, from the British perspective diseases such as small pox,

tuberculosis, and typhus did not become rife during the campaign despite the privations endured by the troops. On the other hand, cholera which had been present in several countries in Europe before war was declared, merely spread to Bulgaria and the Crimea by the movement of the troops. In addition, the fact that it petered out during the winter of 1854–55 when the many problems confronting the Army were at their most serious supports the proposition that a ‘pathogenic price’ does not necessarily have to be ‘paid for the devastation caused by military action’.¹⁹ In the event, it was the simple expedient of improvements in the provision of health care and living standards for the troops that ultimately resulted by 1856 in a ‘Victory over Disease’.

Battlefield casualties

The initial lack of hospital facilities after the invasion resulted in the evacuation of a large number of wounded men to the base hospitals in Turkey after the battles of the Alma, Balaklava and Inkerman. The tempo of fighting was reduced when the siege commenced and thus three-quarters of all wounded men evacuated during the whole campaign had left by the end of November 1854. The progressive improvement in the provision for battlefield casualties is illustrated in Table 2, and this included the opening of a general hospital close to the front line (see sketch below) and a convalescent hospital for the wounded well away from the camps in the spring of 1855. From then on the majority of wounded evacuees would have either been convalescents or were not suffering life-threatening injuries.



The General Hospital and the quarters of the medical staff at Balaklava with the railway in the foreground (from a sketch by Julian Portch), Illustrated Times, 1 December 1855

There were over 18,000 hospital admissions for traumatic injuries during the campaign, and of these 58 per cent were for gunshot wounds, and not surprisingly the ratio of deaths to admissions was the highest at 16 per cent (Table 5). About two thirds of all the casualties

occurred during the six principal engagements. In the trenches the number injured was five or less on forty per cent of the siege days and these would have been managed by the medical officers on routine duty in the front line. On days when firing was more active, as during the five bombardments, or when a sortie by the Russians had to be repulsed, additional personnel from the camp could be called upon at short notice. This meant that there was no priority for a formalized scheme of what is now termed triage. On the other hand, casualty clearing stations were utilized during the assaults on the town of 18 June and 9 September 1855 and this would have permitted patient selection. The advantage of treating the wounded close to the front – as was amply demonstrated during the First World War – was obviously recognized by Hall, the principal medical officer, and his colleagues.

Table 5: The number of deaths among NCOs and men with wounds and injuries, April 1854 – June 1856

	Gunshot wounds	Incised wounds	Burns	Contusions	Fractures	Luxations
Admissions	10,691	1,270	399	4,006	380	1,533
Death	1,706	18	0	21	14	2
Ratio of deaths to admissions (%)	16	1.5	-	0.5	3.5	0.1

[Adapted from House of Commons Parliamentary Papers 1857–58, 2, General Return A]

The hospitals on the Bosphorus

In his perceptive assessment of the Crimean War Lieutenant General Sir George MacMunn concluded that: (1) the ‘scandal’ at Scutari was entirely due to the failure of Sidney Herbert, the Minister at War, to organize hospitals behind the front, presumably in advance of any action with the enemy; (2) Scutari was beyond the power of Lord Raglan and his staff or his principal medical officer to control; and in a footnote to the paragraph he stressed that no one would have thought of making Sir Ian Hamilton responsible for establishing hospitals for the sick and wounded evacuated during the Gallipoli campaign: ‘That was the duty of other authorities in communication with the War Office;’ and (3) Viscount Hardinge, the Commander-in Chief, of the British Army, should: ‘have insisted in the formation of ancillary services for war, having many months to do so, and further should have so forcibly reminded Herbert of his responsibility *in re* hospitals that there should have been no need of the hurried Nightingale mission or *The Times* Relief Fund.’²⁰ On the other hand, Peter Benson Maxwell, one of the Hospital Commissioners sent to the East, was more conciliatory. He considered that once the problems became known in London both Newcastle and Herbert did what they could to ameliorate the situation;²¹ and as would be said today: ‘Too little, too late’.

It is a commonly held assumption that the activities of Nightingale and the Sanitary Commission caused the reduction in mortality in the hospitals at Scutari. However, a systematic assessment of primary sources demonstrates that the mortality at Scutari mirrored extremely closely that at the front, and hence the improvement in the health of the troops in the Crimea, coupled with a policy not to evacuate patients with a poor prognosis, were the principal factors that led to the reduction in mortality in the base hospitals, rather than any major developments instituted locally. Evidence to support this subjective opinion is provided in Figures 5–8. These show that for diarrhoea and dysentery, continued fever, scurvy and frostbite the cumulative proportion (per cent) for deaths in the regimental hospitals in the Crimea and the hospitals on the Bosphorus was very similar and hence the situation in Turkey merely reflected that which obtained at the front. Contemporary correspondence from Nightingale herself provides support for this conclusion. On 19 August

1855 she informed Lord Panmure, the Minister for War who had replaced Newcastle, that: ‘The physically deteriorating effect of Scutari has been much discussed, but it may be doubted. The men sent down in the winter died because they were not sent down till half dead – the men sent down now live because they are sent in time’;²² and she told Herbert unequivocally: ‘Scutari was only a symptom of the army’s malady, not a cause, and once things began to improve at Balaclava, things improved at Scutari. Once the men [...] began to get better food and the weather became warmer, their strength increased, they became more resistant to disease, the number arriving at Scutari went down, the wards became less crowded, and the medical personnel were under less pressure’.²³ Similarly, the initial findings of the Sanitary Commissioners in the camps before Sevastopol confirmed that the army was getting matters under control. They were: ‘much surprised and gratified with the appearance of the camp and of the hospitals [...] as no sanitary recommendations were required from them for the upper camp.’ and that there were ‘no sanitary measure we could recommend [that had] not been carried out in some phase or other’.²⁴

The principal medical officer of the Royal Navy, Deputy Medical Inspector David Deas, also appreciated the situation at Scutari. He had no axe to grind as Nightingale had no dealings with the ‘senior service’ when he informed the Director General of the Naval Medical Department on 19 February 1855 that, though he admired Nightingale, he saw ‘dozens of things placed at her credit which [...] she had nothing to do with; but such is the fashion of the day [she] now gets credit for having both suggested and executed’.²⁵ Similarly, Bostridge, in his comprehensive biography of Nightingale, concluded: ‘A [...] notion, prevalent among an older generation of historians, [and] found in popular historical writing today, is that the dramatic decrease in mortality at Scutari in the first months of 1855 is directly attributable to Florence Nightingale herself. This was transparently not so.’²⁶ In like manner, Ponting surmised: ‘She did not institute many of the reforms ascribed to her [...] in medical terms she accomplished little [...] apart from providing basic comforts.’²⁷

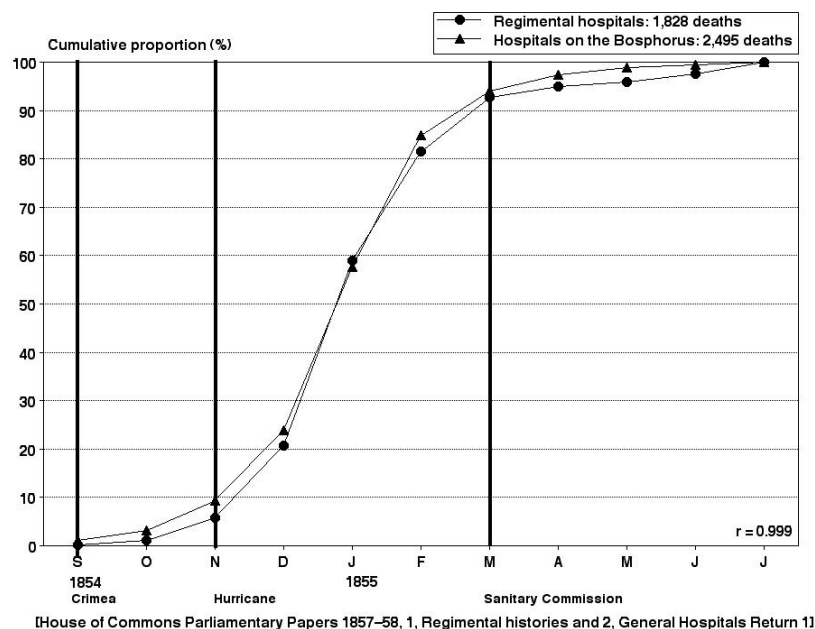


Figure 5: Deaths from diarrhoea and dysentery in regimental hospitals in the Crimea and the hospitals on the Bosphorus, September 1854–July 1855

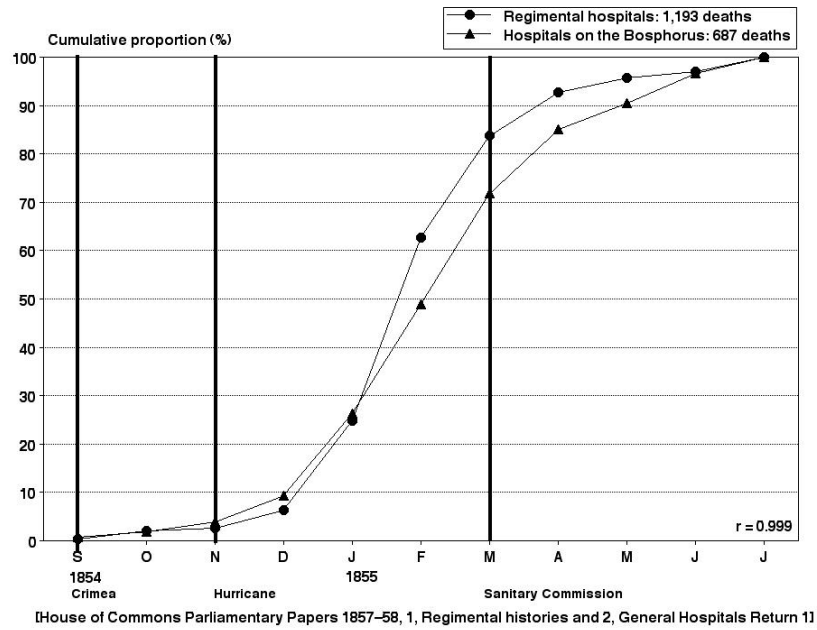


Figure 6: Deaths from continued fever in regimental hospitals in the Crimea and the hospitals on the Bosphorus, September 1854 – July 1855

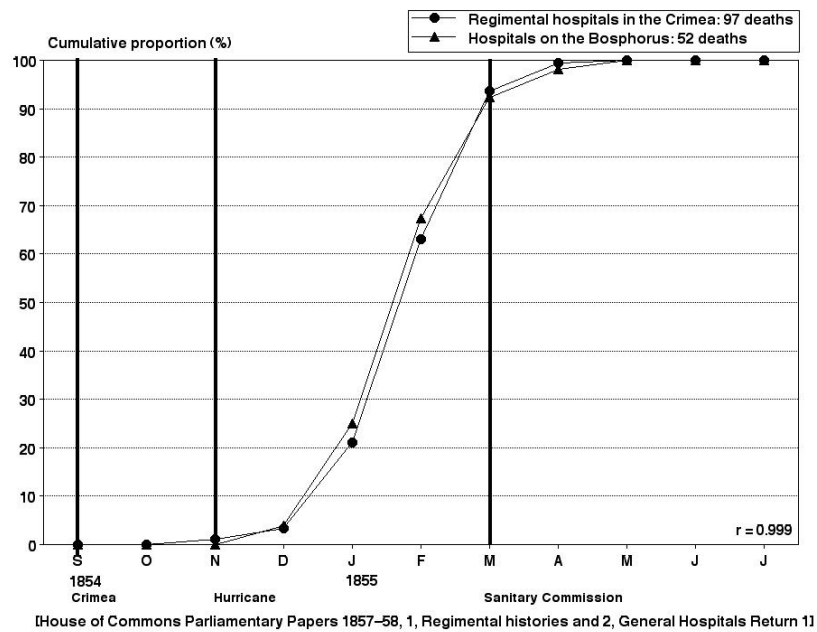


Figure 7: Deaths from scurvy in regimental hospitals in the Crimea and the hospitals on the Bosphorus, September 1854–July 1855

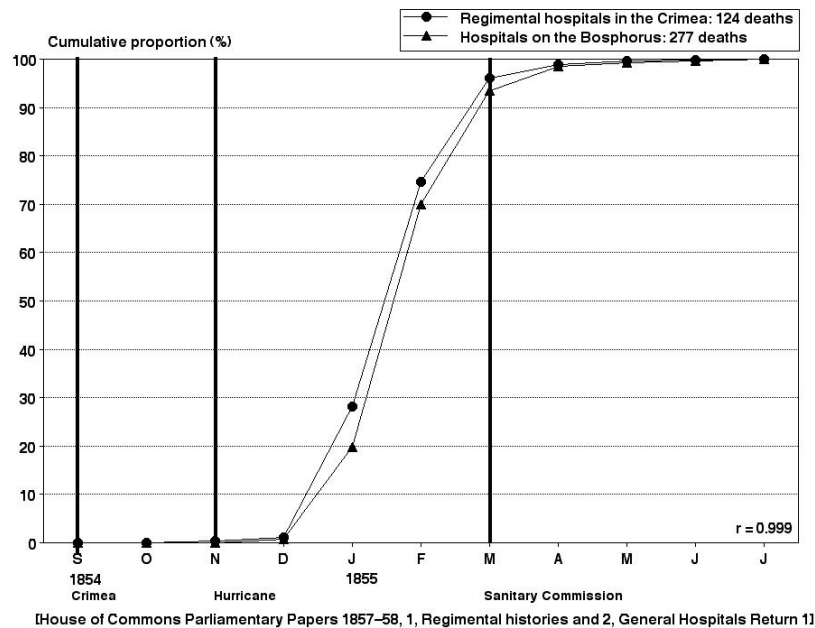


Figure 8: Deaths from frostbite in regimental hospitals in the Crimea and the hospitals on the Bosphorus, September 1854–July 1855

Conclusions

When compared with other British campaigns prior to the First World War the Crimean War was not, with the exception of epidemics of cholera in 1854 and 1855, particularly exceptional from a medical point of view. It did, however, prove challenging for several reasons: dysfunctional management systems in the Army as a whole, especially during the early months; long lines of communication and the total reliance on shipping for supplies; the need to evacuate large numbers of sick and wounded during the first winter; and the appearance of scurvy and other medical conditions associated with malnutrition, and excessive hardship during the winter of 1854–55. The last two factors in particular proved crucial in precipitating the catastrophic deterioration in the health of the troops; and not as might have been expected any breakdown in the provision of health care or the presence of the cholera bacillus.

It would be unfair to suggest that Nightingale was not an extremely influential individual and that many people the world over have benefited in some way from her later achievements which would have been fashioned in part by the experience she gained during the war. Similarly, it would be churlish to suggest that the Sanitary Commissioners, who were able and industrious individuals, did not play a part in the scheme of things. It is just that none of them were responsible for the improvement in the health of the Army at the front as this had already begun to occur in the weeks before the Commissioners arrived in the Crimea in April 1855. There is thus little evidence to support the assertion that Nightingale made later to Lord Shaftsbury, that the Sanitary Commission ‘Saved the British Army,’²⁸ or indeed that their efforts were other than subsidiary. Rather, it was the progressive enhancement in the standard of living of the troops by providing adequate food, clothing, fuel and shelter, coupled with improvements in health care in the camps and general hospitals in the Crimea, from early in 1855 that resulted in the ‘Victory over Disease’ enjoyed in 1856 – and which Panmure acknowledged when proposing a vote of thanks to the armed forces in the House of Lords after the ratification of the Peace Treaty.²⁹

The ‘Victory over Disease’ which occurred towards the end of the campaign was not due to the contributions of any one person, or even a group of individuals. Rather, it represented the involvement of many people in many walks of life who worked, possibly unwittingly, for a common purpose to provide such a gratifying result.

Afterword

The Covid-19 virus has demonstrated dramatically how a widespread outbreak of a potentially fatal disease in the community can rapidly overwhelm a hospital service that is generally sufficiently well equipped to deal with anticipated peaks in the incidence of seasonal infectious diseases. The problems in the Crimea during the first winter were obviously quite different. However, they were firmly based in the army community encamped before Sevastopol, and in like manner the hospitals soon became overwhelmed. As with Covid-19, the crisis had to be resolved in the community, and not in the hospitals, and this is exactly what occurred in the Crimean peninsula nearly 170 years ago.

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Notes and References

- 1 Kaufman, M.H. 2000. *Surgeons at War: Medical Arrangements for the Treatment of the Sick and Wounded in the British Army during the Late 18th and 19th Centuries*. London: Greenwood Press, 131.
- 2 Harrison, M. 2004. *Medicine and Victory. British Military Medicine in the Second World War*. Oxford: University Press, 11.
- 3 See Cooke, B. 1997. *The Grand Crimean Central Railway* (2nd edition). Knutsford: Cavalier House.
- 4 House of Commons Parliamentary Papers 1857–58 [2434] XXXVIII.Pt.I.1 & XXXVIII.Pt.II.1: *Medical and Surgical History of the British Army which Served in Turkey and the Crimea during the War against Russia in the Years 1854-55-56*.
- 5 Hinton, M. 2019. *Victory over Disease. Resolving the Medical Crisis in the Crimean War, 1854–1856*. Warwick: Helion, 95.
- 6 Hinton, 2019, 55–78.
- 7 Shepherd, J. 1991. *The Crimean Doctors. A History of the Medical Services in the Crimean War*. Liverpool: University Press, 2:412–51.
- 8 Hinton, 2019, 97–131.
- 9 Shepherd, 1991, 2:386–7.
- 10 Shepherd, 1991, 2:463 and Hinton, 2019, 66–7.
- 11 House of Commons Parliamentary Papers, 1857–58, 2:43–169.
- 12 Editorial. 1831. ‘The Ravages of the Rise, Progress, Ravages, etc. of the Blue Cholera in India.’ *The Lancet* 17(429): 241–84.
- 13 Hinton, 2019, 202.
- 14 Hinton, 2019, 202–13.
- 15 Hinton, 2019, 195–201.
- 16 House of Commons Parliamentary Papers, 1857–58, 2:45.
- 17 Bell, J. 7 December 2013. ‘Infections are the True Beneficiaries of War.’ www.bbc.co.uk/news/health-24962331 (Accessed 24 January 2023).
- 18 Martineau, H. 1859. *England and Her Soldiers*. London: Smith, Elder, & Co., 270–1.
- 19 Cooter, R. 2003. ‘Of War and Epidemics: Unnatural Couplings, Problematic Conceptions.’ *Journal of the Society of the Social History of Medicine* 16(2): 283–302.
- 20 MacMunn, Sir G. 1935. *The Crimea in Perspective*. London: G. Bell & Sons, 244, 262 & 241.

- 21 Anon [Maxwell, P.B.]. 1855. *Whom Shall We Hang? The Sebastopol Enquiry*. London: James Ridgeway, 208–22.
- 22 Douglas, Sir G. and Ramsey, Sir G.D. (eds). 1898. *The Panmure Papers*. (London: Hodder and Stoughton, 1:356–7.
- 23 Gill, G. 2004. *Nightingales, The Story of Florence Nightingale and her Remarkable Family*. London: Hodder and Stoughton, 383–4.
- 24 Hinton, 2019, 278–9.
- 25 House of Commons Parliamentary Papers 1854–55 (218) IX.Pt.II.1. *Second Report of the Select Committee on the Army before Sebastopol*, 723.
- 26 Bostridge, M. 2008. *Florence Nightingale. The Woman and Her Legend*. London: Viking, 248–9.
- 27 Ponting, C. 2004. *The Crimean War. The Truth Behind the Myth*. London: Chatto & Windus, 194–5.
- 28 Hodder, E. 1887. *The Life and Work of the Seventh Earl of Shaftsbury, KG*. London: Cassell, 195.
- 29 *Hansard*: HL Deb 08 May 1856 vol 142 cc 182–205.