WITH THEM THROUGH HELL

Love drives me back to grope with them through hell.

Siegfried Sassoon, ‘Banishment’

WITH THEM THROUGH HELL

New Zealand Medical Services in the First World War

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INTRODUCTION

> Whilst we honour our soldiers, let us not forget the medicos . . . There are no exceptions, wherever you go it is the same, just an unassuming attention to every need. Not in the limelight does such heroism shine, but the angels see it and take notice.
> — Chaplain Thomas Fielden Taylor, *Grey River Argus*, 17 February 1917

On the night of 11 August 1917, 24-year-old John Moloney of the New Zealand Rifle Brigade was digging a trench near the River Warnave in France when he and his companions were hit by a shell. 'Two poor lads working on either side of me were cut to ribbons. I could see their vertebrae. One whimpered and died. It was an awful scene, the cries of the wounded and dying sounded on all sides.' A 'melancholy procession' managed to reach the dressing station of medical officer Richard (Dicky) Barron.

> The lad on the stretcher in front of me . . . was wounded in the throat, he breathed with a heavy spluttering gurgle that got fainter and fainter . . . One fine big fellow sat propped up in a corner, his face ashen coloured. He had been badly smacked in the lungs, and there was foam at his mouth. He called gently 'Mother!' and his head dropped. He was gone . . . One little fellow had a left hand that looked like raw meat, it was mangled so. Dicky had a big shears and snipped off hunks of flesh. He whispered to me that the poor fellow couldn't feel it.[1]

There were many ways to be wounded or killed in the First World War. Bodies were pierced and mangled by the red-hot metal of shrapnel; limbs, hands and feet were torn or blown off; bones were shattered; tendons and arteries severed; faces mutilated beyond recognition. Men suffered brain injuries and deafness from the constant blast of shellfire. In close-quarter fighting there was the threat of stab wounds from bayonets or entrenching tools. Gas blinded and blistered and excoriated throats and lungs. The petroleum from flamethrowers caused appalling burns.[2] Added to terrible physical assaults were the high risk of infection and nerve damage, and the psychological effects of severe trauma. Although this was the first major

conflict in which there were more combat deaths than fatalities caused by disease, serious sickness was widespread — dysentery, influenza, typhoid.

The thousands of men, wounded and ill, who were brought into regimental aid posts, dressing stations, casualty clearing stations and hospitals were cared for by another, less familiar fighting force, armed not with guns but with scalpels, bandages, drugs and compassion.[3] During the First World War, hundreds of New Zealand doctors, nurses, stretcher-bearers, orderlies and ambulance drivers, dentists, chiropodists, pharmacists, physiotherapists and chaplains carried out this vital work, often at great personal risk, as veterinarians also did for the horses, mules, donkeys and camels that provided essential military transport. Their extraordinary contribution has not always received the attention it deserves.

There is, of course, a central irony here. People trained to mend and heal were required to make hurt and ill soldiers and animals fit enough to fight again, so they could once more be wounded — or killed. There is an easy answer to this conundrum: to wage war a nation needs healthy troops, and the means of restoring them, without delay, to their place on the front line. This was certainly how New Zealand's military leaders, and its government, saw things, and the men themselves knew that unless they received a severe wound or were extremely sick, they would inevitably return to the front. One way of dealing with the ethical dilemma was to remove altogether the conflict between practising medicine and fulfilling military duty. 'We doctors simply go on healing the sick and patching up broken bodies . . . the enemy to us is not even an enemy but only part of our job of care. For a doctor there is no war, or at least there need be no war.'[4]

There is another paradox: war can stimulate significant medical advances. Many of the innovations born of the First World War are now second nature in military medicine: triage (ranking the urgency of casualties' condition to decide the order of treatment), debridement (the removal of unhealthy tissue from wounds to help healing), effective blood transfusions, the widespread use of X-rays, the vital importance of inoculation and vaccination, treatment of psychological war damage, life-altering maxillo-facial and oral surgery, and the role of physical therapy and rehabilitation in recovery. In the memorable words of medical historian Leo van Bergen, 'War was a colleague, war was a teacher. War was the doctor of doctors.' But, as he also notes, without improved medical care the terrible battles of the First World War would have been fought with far fewer men and would probably have ended before November 1918. It is worth remembering, too, the extraordinary advances, such as the discovery of penicillin, that have *not* been associated with war. As Bergen asks, 'Why don't we ever say: peace is good for medicine?'[5]

Because the sophisticated new weaponry of this war enabled attacks from a much greater distance, wounds and death were meted out far more impersonally and far more unpredictably: places of complete safety were rare. Slow, painful deaths were common, but most men died almost before they knew they had been hit.[6] The number of casualties in the First World War can never be certain — some 18 million were killed and 23 million wounded. Of New Zealand's 1.1 million inhabitants, almost 100,000 served overseas. Over 18,000 of them died during or soon after the conflict, and more than 40,000 were wounded or suffered from disease.

The cost of war. Allan McMillan, a Dunedin miner, was just shy of his 26th birthday when he was severely wounded in France in September 1916. He received a bad gunshot wound to his right hand, and his left forearm eventually had to be amputated. Although he returned to New Zealand in 1919, he died on 21 June the following year of broncho-pneumonia and emphysema. TE PAPA, O.031469

New Zealand's high commissioner to London, Sir Thomas Mackenzie (1853–1930), with Te Rangi Hīroa (Peter Buck) during a visit to New Zealand troops in France. Hīroa (1877?–1951), who was decorated for his work on Gallipoli, was the only Māori medical officer to serve in the war. Mackenzie was a kindly and sympathetic figure with a deep concern for the welfare of New Zealand soldiers overseas. His son, Clutha, was blinded on Gallipoli.

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The New Zealand Medical Service in the Great War 1914–1918, written in 1924 by Andrew Carbery, a surgeon who was a serving officer, is a detailed and comprehensive account. Carbery was given an unenviable brief, especially when the principal technology available to him was a typewriter: one year to research his subject, six months to write it, and three to six months to see the book through the press. Particularly under these constraints, he did an admirable job — for a man of his time writing in an official military context only a few years after the war ended. Inevitably, there are omissions — the almost non-existent coverage of the nurses' role is the most glaring — and Carbery tends to gloss over or sidestep areas of controversy. There is, too, understandably, a strong imperial spirit, but the book is thorough and readable.

For that reason, and because it is written a century after the First World War ended, *With Them Through Hell* concentrates on telling the *story* of the men and women of New Zealand's medical services, where possible in their own words. Its scope goes beyond traditional military medicine to embrace others who fought to keep the men and animals of the war alive and healthy. For reasons of size, it focuses on those serving overseas.

It is very largely a Pākehā story. Only one Māori, Te Rangi Hīroa, also known as Peter Buck (Ngāti Mutunga), served as a medical officer in this war, with the mainly Māori Pioneer Battalion in the Middle East, Gallipoli and France. (Although not a front-line fighting unit, the battalion, which built roads, dug trenches and fulfilled other engineering and logistical duties, often found itself in perilous situations, working under fire.) He was twice mentioned in despatches and received the DSO. Māori served as stretcher-bearers, both officially and otherwise, and their pioneer role also made them invaluable in other ways. At Passchendaele, for example, they 'did yeoman service in bringing up planks and laying them crosswise to give a foothold' in the mud for the struggling stretcher-bearers.[7]

New Zealand's First World War medical story has much to say about the relationship with and attitudes towards the British. This was a period in which the regular newspaper headlines, 'New Zealanders at Home' and 'Our Boys in Britain', meant the same thing: Kiwis were serving the empire and Britain was home with a capital H. They certainly faced prejudice from some British doctors and nurses. The New Zealanders soon realised, however, that they were the equal of, if not often superior to, the Mother Country's military medics, and their reputation would grow as the war went on. The often-repeated idea that New Zealand discovered its nationhood in this war, particularly on Gallipoli, is clichéd and sweeping, but, like the troops, the men and women of the medical services certainly discovered that their skill, courage and devotion needed no imperial imprimatur.

The medical care for the men who fought in the New Zealand Expeditionary Force during the First World War went from head to toe, and from enlistment through often multiple experiences of sickness and wounding to their return home. Doctors (almost all male), nurses (and VADs — members of the Voluntary Aid Detachment), stretcher-bearers, orderlies and ambulance drivers were, of course, to the fore, but others played a significant part. Dentists looked after the soldiers' teeth, so they could chew their rations; chiropodists cared

for their feet, so they could march; experts in massage (physiotherapy) encouraged wounded and disabled men towards recovery; pharmacists ensured they received the right drugs. There was skilled care, too, for the animals, from the New Zealand Veterinary Corps.

After a man was wounded on the battlefield, he moved along an evacuation chain that stretched from hasty, immediate front-line treatment to a casualty clearing station (CCS) to a stationary and/or a base hospital, and then, perhaps, to a cot on a hospital ship bound for Britain or home. New Zealand would send two stationary hospitals overseas during the war — despite their name, they moved about with the troops.[8] These served in Egypt and Salonika, and in France at Amiens, Hazebrouck and then Wisques. Wounded Kiwis were sent to British base hospitals in France and to New Zealand's three general hospitals in Britain, at Brockenhurst, Walton-on-Thames and Codford. The women of the New Zealand Army Nursing Service (NZANS) served in hospitals, in CCSs and on hospital ships. Although not allowed in the front line, they were often close to it. Untrained, but also essential, were VADs, who assisted with domestic and nursing work in hospitals and elsewhere, and the members of safe sex campaigner Ettie Rout's Volunteer Sisterhood.

Twenty-six medical officers (MOs), about a third of them from the volunteer New Zealand Medical Corps,[9] had accompanied the troops who fought in the 1899–1902 South African War. Each of the 10 contingents took at least one doctor, the larger ones two or more. They both acted as regimental medical officers (RMOs) and were posted to British military hospitals. But the imperial arrangements and equipment were poor. A hundred and thirty-nine New Zealand soldiers died of disease, usually typhoid, principally as a result of vestigial sanitation and ineffective treatment. Seventy-one were killed in action or died of wounds.[10] The treatment of the wounded and sick needed to be better in this war.

By 1914, what was now the New Zealand Medical Corps (NZMC) had been in existence for six years, but despite changes in the wake of the 1909 Defence Act, and regular camps at which field ambulance men practised such skills as 'stretcher drill, searching for wounded, the loading and unloading of ambulance waggons, and the placing of patients on and off stretchers',[11] the NZMC had problems. The various units were widely scattered, especially in rural areas, busy doctors had little time to devote to military work, the few officers were too far apart to easily share knowledge, and it was hard to make progress without a qualified, full-time Royal Army Medical Corps (RAMC) instructor. Despite the laudable enthusiasm and energy of the men themselves, 'New Zealand was not, from a medical point of view, prepared for war'.[12]

Sufficient medical personnel — four medical officers, two dental surgeons, 67 NCOs and men, plus six (later seven) nurses — were rapidly found for the Advance Party of the New Zealand Expeditionary Force that left in August 1914, in response to a request from Britain, to occupy the German colony of Samoa. The 48 officers who accompanied the Main Body of the NZEF when it departed for war in October were all volunteers with years of NZMC service behind them; some, like Christchurch surgeon Percival Fenwick, had served in South Africa. Almost all the 328 NCOs and other ranks were also corps men.[13] An outbreak of respiratory diseases, measles and cerebro-spinal meningitis at Trentham camp in the winter of 1915 killed 27 recruits and caused a nationwide scandal, laying horribly bare the faults of a

'loosely organized part time territorial medical service'.[14] Some sensible improvements were subsequently made.

Medical men throughout the country stepped up both to go overseas and to staff the training establishments at home. Until 6 October 1915, when Awapuni camp, at the racecourse outside Palmerston North, became the NZMC training centre, medical instruction at Trentham, amid the general preparation of hundreds of recruits, was 'haphazard'.[15] Ormond Burton, who would serve with the field ambulance, nevertheless found it 'interesting and very practical indeed. We had to look after the health of two thousand men and deal with incidental accidents. The doctors . . . were mainly young men who had recently qualified with a sprinkling of older men to stiffen them. Not a bad lot!'[16]

There were, however, complaints from doctors on Gallipoli about ill-prepared orderlies, and the first 20 who ended up at the New Zealand hospital in Cairo were not acceptable, in the view of commanding officer William Parkes. 'I regret that [they] are for the most part untrained,' he reported at the end of October 1915, 'and would strongly recommend that a proper course of instruction be given in Camp prior to embarkation and that a Medical Officer be detailed to continue instruction during the voyage.'[17] Not all the orderlies were below par. In May 1915 MO Thomas Ritchie felt compelled to 'say a word of praise' about his, a man named McCann. 'Although he had absolutely no knowledge of nursing or of drugs he has carried out my instructions to the letter . . . What he lacks in experience he makes up for in gentleness & application. He works night & day in the little hospital with another new chum from amongst the troops to help him.'[18]

General Alexander Godley, the General Officer Commanding the NZEF, had been concerned about the state of New Zealand's military medical services before Gallipoli. In February 1915 he was 'afraid that our men have not really got quite sufficient experience for managing a large number of casualties if we get them'. At the front he accepted the offered services of Englishman Colonel Neville Manders, a distinguished entomologist and military surgeon who would serve on the peninsula with the New Zealanders and Australians.[19] By April, wartime defence minister James Allen agreed that an experienced Royal Army Medical Corps officer was needed to head and instruct the NZMC at home,[20] and Colonel Robert Henderson arrived in New Zealand on 6 September 1915 to take up his duties as surgeon-general. Henderson made the establishment of the dedicated Awapuni camp one of his first initiatives.

For the 350 to 400 medical men training at Awapuni at any one time, the experience was not luxurious. Although amenities were added — lights, vegetable gardens and a 'shower bathroom' — the accommodation arrangements continued the bracing and money-saving pattern set when the camp had housed sick men sent from Trentham. 'There are,' the *Dominion* reported on 17 January 1916, 'neither tents nor hutments.'

> The officers and n.c.o.'s sleep on the balconies of the stewards' stand and secretary's offices, and the men have their quarters in the grandstand, sleeping in the upper part of it and taking their meals in the portion used as the public dining-room on race days . . . The end of the grandstand, which is exposed to the prevailing wind, is sheeted in with railway tarpaulins.

> The men have their beds on the broader of the ledges and place their gear in the seat above them. Everything is kept in ship-shape order and the quarters are comfortable and tidy.[21]

The camp was initially headed by the local military district commander, with Auckland doctor Major James Hardie Neil in charge of all the training, but by early 1916 Henderson had decided that an NZMC man should head the camp.

For everyone other than officers, the challenging programme comprised nine weeks of basic instruction at Awapuni, a month of practical hospital work at Featherston or Trentham, seven days of leave and then a final week back in camp. Norman Gray's practical experience was gained at Trentham. Because an NZMC man 'may have to act as a bearer, a nurse, a sanitary engineer, a water expert, a cook, a clerk, a storeman, or a driver, and these are only some of the positions', Gray and his companions took turns 'doing all the work of the place, nursing one week, on guard the next, sanitary work, cookhouse, dustmen, officers, orderlies'.[22] As well as ambulance drill with stretchers and wagons, there was 'field work reproducing as nearly as possible actual service conditions', along with lectures on everything from anatomy and physiology, wounds, fractures and bandaging to shock, fits, suffocation, 'choking, cold, foreign bodies in the eye and ear, drowning, poisoning, and so on'. The hospital work and nursing instruction included 'the use of surgical instruments, anaesthetics and antiseptics, the administration of medicines, surgical nursing, the treatment of infectious cases, observation of the sick'. Territorial officers gave lectures on such topics as discipline, military law, map-reading, judging distances and signalling. There was also drilling in infantry formations, to develop a 'soldierly spirit'.[23] It was little wonder, as the *New Zealand Herald* noted, that the men were 'busy from reveille — 5 a.m. — with short intervals for rest, until nightfall'.[24]

Those training at Awapuni could not choose their role in the NZMC; the authorities decided who went where. Some men who enlisted 'with an eye on a hospital ship' and missed out became 'very indignant'. They were, apparently, under the impression that such a post was a 'soft snap' but, said the *Dominion* sternly, and correctly, 'They are mistaken. It is very hard work.'[25] It was all relative, though. Front-line men like Gray would come to feel that some 'drafted to Stationary and Base Hospitals and Hosp. Ships . . . work all manner of "slinters" [tricks] to stay there for the duration' and 'should be given a chance to show their prowess at stretcher bearing and whizbang dodging . . . There is absolutely no comparison between the 2 kinds of work'.[26] Not all NZMC medics served overseas. Many were needed to staff the camps at home to ensure that the recruits were healthy and well cared for while training, and there were frequent calls throughout the war for more men, sometimes those not fit enough to return to the front, to do such work.

Awapuni-trained ambulance men sailed on the first charter of the hospital ship *Marama* in December 1915, and then left for overseas at regular intervals. As the *Dominion* reported in January 1917, 'every week fresh drafts have been going in to take the place of those who go on active service.'[27] The men continued to prepare while they waited to depart. Those embarking on the other hospital ship, the *Maheno*, in January 1917 travelled south to Christchurch to camp at the A & P showground at Addington, where they were 'revising their training with all kinds

above A somewhat distant and formal figure who was not always liked or understood by the men he led and admired, British-born Alexander Godley (1867–1957) was General Officer Commanding the New Zealand Expeditionary Force throughout the war. ALEXANDER TURNBULL LIBRARY, 1/4-009477-G

below James Allen (1855–1942), who was knighted in 1917, held the challenging post of New Zealand defence minister from 1912 to 1919, and also acted as prime minister for lengthy periods while the country's joint leaders, William Massey and Joseph Ward, were overseas. He drew some criticism for his handling of the portfolio but was stoic and hard-working, especially in the face of his son John's death on Gallipoli in June 1915. ALEXANDER TURNBULL LIBRARY, 1/1-013396-G

of ambulance work [and] being kept in condition by route marches'.[28] The learning continued during the voyages. When not on duty, the 25 NZMC other ranks going overseas with 500 Australian troops on HMS *Persia* in August 1915 practised stretcher drill and bandaging. 'All the Hospital work has fallen to our unit,' MO Ronald Orbell reported when the ship reached Suez, 'and I and my officers have taken every opportunity of teaching the men as much as possible of the ordinary hospital routine.'[29] Gray, on the *Tahiti*, considered 28 October 1915 'One of the best days so far, from our training standpoint' — lectures on the blood and circulatory system and the causes of disease were supplemented by 'signalling and stretcher drill'.[30]

Extra NZMC training was added in April 1917, when the Tauherenikau racecourse in Wairarapa became the venue for four weeks of practical instruction in military hospital and nursing work after a month of squad and stretcher training at Awapuni. At the racing club's expense, many alterations had been made, including converting the totalisator building into a 40-bed ward. The men also attended lectures and demonstrations, for which 'anatomical exhibits and specimens are provided'.[31]

New Zealand's medical profession was eager to serve. The nurses would have a much harder job convincing the authorities that they should go overseas — 550 would eventually do so — as would female doctors, but male doctors and surgeons were accepted without question. It is hard to put an exact figure on the number who served overseas with the NZMC. Carbery states that 385 of New Zealand's 700 or so registered doctors left the country, along with 3248 other ranks — recruits trained to work as orderlies and stretcher-bearers. But painstaking research by Pat Clarkson reveals a doctor/surgeon total nearer 430.[32] A number of New Zealand doctors also served with the RAMC, often because they were working in Britain and enrolled there when war broke out. The pay was better, too, in the British service.[33] Some later enlisted with the NZEF. Although the medical school at the University of Otago had opened in 1875, many of the older, more experienced doctors who served during the war were trained in Britain, particularly at the University of Edinburgh.[34]

Not everyone wanting to enlist was able to do so immediately. Initially, preference went to the waiting list of NZMC men — like Auckland surgeon Arthur Purchas, who had been with the volunteer force and then the territorials for 29 years when he enlisted on 26 August 1914[35] — as Thomas McKibbin from Hastings discovered when he tried to volunteer as a surgeon on 8 April 1915. He had been a territorial officer, but his membership had lapsed and the authorities regarded him as a civilian; he did not leave as an NZMC officer until mid-August. The Mother Country was calling too. In June 1915 the War Office requested an additional 100 New Zealand doctors, who would be 'temporary lieutenants of the R.A.M.C.' Those keen to apply were to do so via the inspector-general of hospitals or, if they were NZMC members, the director of medical services in Wellington.[36]

Some medical men, desperate to go but unable to get an NZMC place, headed overseas on their own initiative — and at their own expense. Louis Barnett took leave of absence from the chair of surgery at Otago University to sail for England in March 1915. From May to August,

thanks to a temporary RAMC commission achieved with the help of New Zealand's high commissioner in London, Thomas (later Sir Thomas) Mackenzie, he was chief surgeon of the 1200-bed Imtarfa military hospital on Malta. 'I have got a splendid position at this great institution. I am busy from morning to night and am happy in the thought that I am doing something worth while.'[37] Barnett was then attached to the NZEF at Godley's request and in mid-1916 was appointed the force's consulting surgeon.

There were clearly some initial administrative problems. In a letter to the *Auckland Star* in July 1915, 'Sawbones' maintained that 'applicants who volunteered months ago have not yet received even the customary courtesy of an acknowledgment of their letters, much less any intimation as to whether they are, or will be, required . . . Only last week two junior resident medical officers left the local hospital for Australia, after waiting in vain for news for months.' The correspondent also believed that some doctors were '"wired" to proceed to Trentham at a few days' notice' and expected to wind up their affairs 'like the itinerant scissors-grinder his working outfit'.[38] There were also mistakes later in the war. NZMC Captain Edward Edie was serving in France in August 1918 when he felt obliged to write to the *Southland Times*, which had reported his calling up in the latest ballot (conscription had been introduced in 1916). 'For your benefit and also the benefit of others (including the Defence officials) I wish to state that I have now been sixteen months in France — all of that time (except a few weeks in hospital, the result of a wound) — I have spent as medical officer to a Battalion, which is not the softest of positions in this great game over here.'[39]

Speed in applying could be a factor too, even for NZMC members. The telegram Gore surgeon William McAra sent to his local MP expressing his willingness to serve overseas was forwarded to Allen on 12 August 1914; on the 16th he was told that he had 'delayed his application so long that when he applied, all the openings were filled and many wanting to take a chance of any vacancy that might occur'.[40] He did leave in December. One who moved swiftly was Major Charles Hand-Newton, 'who had only been a short time in practice' and had just been appointed to Christchurch Hospital as assistant surgeon. Two days after war was declared he and Dr Neil Guthrie went into camp at Addington; the next day they were transferred to Awapuni. Hand-Newton was appointed second in command of the Mounted Field Ambulance because he had been 'an active Territorial Medical Officer'. The other original MFA officers, all from Christchurch, were James Bell, Charles Hercus and Alexander Trotter, plus freshly graduated student doctors William Aitken, Donald Milne and Robert Withers. Their commander was South African War veteran Lieutenant-Colonel Charles Thomas from Timaru.[41]

The doctors who remained at home did their bit. On 10 August 1914 the *Nelson Evening Mail* reported that Wellington GPs would 'give free medical attendance to the wives and children of men who go to the front' and 'carry on the practices of doctors accompanying the troops'.[42] Reports like this, in the *New Zealand Herald* of 17 January 1916, became common. Alexander Grant, who had been acting superintendent of Auckland Hospital for 11 months in place of Charles Maguire, who was serving in Egypt, 'has received a commission as captain in the New Zealand Medical Corps . . . and will leave for the Awapuni camp to-morrow evening'.

He had 'been the recipient of several presentations': a silver spirit flask, an officer's kit-box, a travelling case and 'an enlarged photograph of themselves' from his returned soldier patients.[43] But the enthusiastic medical response, often by senior and highly trained men and women, left New Zealand badly short of medical professionals. In July 1917, the *Press* could report that 'in Christchurch alone, 23 out of 46 doctors in practice are either on service or have been'.[44]

The doctors who signed up had the requisite medical knowledge. Many, though, as NZEF officers, had to acquire military expertise, which included training and handling the men they would be commanding, ordering supplies and learning such unexpected skills as digging latrines. After Awapuni, they had a week's final leave before departing for duty. The pressure to keep the training cycle going was clear in an April 1916 letter from the camp commandant, Scottish-born Auckland surgeon Russell Tracey-Inglis. To get an extra two medical officers ready for the Twelfth Reinforcements, he would have to 'push on' with their training and cut their time by a week. Once they and others already chosen left, he would have only two men still in training, 'so that if you want officers trained to go with the Thirteenth Reinforcements I shall need them in camp at once'.[45]

William Barclay, who served on the second charter of the *Maheno*, certainly remembered a briefer experience. 'We had to get some military training so we went up to Awapuni [where they] tried to teach us to give instructions to squads. We were two weeks there and then back to Wellington to equip ourselves with a suitable uniform — Khaki serge and gabardine lighter uniform, riding breeches, spurs and sword [available from the barracks for £3], as we discovered to our consternation at the last moment.' Some returned their swords and got their money back.[46]

As the war went on, doctors and surgeons who had already served overseas or were home on leave shared their expertise as camp instructors. At the beginning of June 1916, the *Free Lance* reported that 'Doctor Arnold Izard — we beg his pardon, Captain Izard — has been spending his time ashore in the N.Z.M.C. Camp at Awapuni and instructing the "Linseed Lancers" (as they term themselves) in many things.' Izard was 'the most popular as well as the most practical officer in camp . . . the friendly little chats the Captain has with his own section during "smoko" or a "breather" are eagerly listened to by the boys, and [are] the proper way . . . to make soldiers aware of the dangers of the East [brothels] and the proper and manly way to meet or avoid these pitfalls.'[47] When No. 2 Field Ambulance was at Awapuni, it 'had the inestimable benefit of the services of Major A. A. Martin, who trained the men at the Palmerston North Public Hospital, and of Matron [Ada] Kilgour, of the Old Men's Home at Awapuni, under whose careful tuition they became remarkably efficient in ward duties and nursing'.[48] Returned doctors also often gave lectures about their experiences, to encourage recruitment and to inform and enthuse the public.

The medical men who left New Zealand with the Main Body included 21 Otago medical students in their final (fifth) year, who had responded with 'quite remarkable speed' when news of the outbreak of war was received. That very day, 5 August, they signed a letter stating their willingness 'if qualified, to place their services at the disposal of the New Zealand Government as Medical Officers for the Expeditionary Force'.[49] Among them was William Aitken. 'To meet

the medical emergency,' he recalled many years later, the final exams were held in August rather than December, so 'I became qualified to practise medicine three months earlier than expected. At once I volunteered for service overseas and a week later a telegram came to say that I had been appointed a lieutenant in the N.Z. Mounted Field Ambulance which was being mobilised at Awapuni.' Aitken was on a train next morning.[50] Also eager to serve was a sizeable group of third-year students, whose first professional exams were brought forward; many who passed volunteered as stretcher-bearers. Others at various stages of their training would also enlist. Fourth-year student Thomas (Tom) Denniston, 'a very popular young fellow, of a most engaging disposition', was only 24 when he died of enteric fever (typhoid) on Malta after serving as a sergeant in the NZMC.[51]

Gallipoli was a brutal shock for these enthusiastic but inexperienced young men. John Russell of the 1st Battalion Wellington Infantry Regiment, who reached the peninsula in time for the horrors of Chunuk Bair, and did much to help the wounded, described 'an open-air operating theatre where . . . a very-severely wounded chap [was] being operated upon by an ex-Wanganui boy, Dr. Raymond Kitchen, for the removal of shell splinters from his middle area'. Twenty-one-year-old Kitchen, a first-year Otago student, would be mentioned in despatches for conspicuous gallantry at the Dardanelles. Later in the Gallipoli campaign, a number of the medical students who had left New Zealand in 1914 were sent home to complete their studies. Several returned to serve again.[52] Admirable though the students' patriotism had been, it was clear that proper preparation was required. Accordingly, a voluntary Officers' Training Corps was established at Otago University in mid-1916 to 'provide medical students in the Dominion with a standardised medico-military training' spread over four years.[53] Several of the students who went overseas in 1914 served with distinction. Aitken was awarded the Military Cross; both Kenneth MacCormick and Philip Jory received DSOs. After being mentioned in despatches for his work on Gallipoli, Aubrey Short won the MC in France.

Matters of age and experience caused problems when, in March 1915, all NZMC lieutenants who had sailed with the Main Body were promoted to captain, regardless of medical achievement. This meant that young, recently qualified men had the same rank as surgeons who may have held important hospital or university appointments.[54]

There was no question that male medics would be permitted to care for New Zealand's war casualties, but female nurses and doctors were another matter entirely. The New Zealand Medical Corps Nursing Reserve had been gazetted on 14 May 1908, and Janet Gillies, who had nursed in South Africa, became matron-in-chief. Her reserve, however, had no nurses and the authorities stonewalled her attempts at recruitment. Organisation was not her forte and living in Nelson made communication a problem. She faced, too, a determined and ambitious force in the redoubtable Hester Maclean, assistant inspector of hospitals in the Department of Hospitals and Charitable Aid, a vital force behind the New Zealand Trained Nurses' Association and the founding editor of the nursing journal *Kai Tiaki*. Close to the government, Maclean had power and influence, and knew how to use them.

In June 1910 a frustrated Gillies stepped down and Maclean stepped up, though she was not made matron-in-chief and asked to set up a New Zealand military nursing service until August 1911. Despite some progress, bureaucratic to-ing and fro-ing was still going on when war broke out. Since 'it would be likely a body of Nurses would . . . be sent with the troops', wrote an exasperated Maclean, would it not be sensible to ask for volunteers, sign up nurses and then deal with the red tape? The authorities disagreed. 'It is not intended to send any Nurses with the Expeditionary Force,' came the reply on 6 August, 'and you would be doing us a great favour by letting this be known among Nurses, as much time is spent in answering the numerous applications which are coming in.'[55]

But suddenly everything changed. On the morning of 7 August Maclean was asked to organise six nurses to travel to Samoa with the Advance Party, and by the next day she had approval to enrol women for the New Zealand Army Nursing Service. This did not, however, amount to a real beginning for the organisation: the authorities simply wanted replacements for the German nursing staff in Samoa.

Maclean and the government were deluged with impassioned requests from both nurses and untrained women burning to serve overseas. Mary Duff, for instance, had both a first aid certificate and 'a great deal of experience in nursing . . . I am most anxious to go, and do what I can for the brave fellows, who have to face so much danger and suffering.'[56] Allen remained unmoved. As he told Duff, 'we are not sending any nurses with the Main Expeditionary Force. I am grateful to you for the offer of your services, but under the circumstances you will see that they cannot be accepted.'[57] Allen was unwilling to budge: 'until the Mother Country asked us to provide nurses it would be almost a presumption to send them. It would look like interfering with the Imperial arrangements.' But pressure from other quarters, including a deputation from the New Zealand Trained Nurses' Association, and the realisation that more and more men were leaving to fight, finally propelled the defence minister into action. On 7 January 1915 the governor, Lord Liverpool, offered 50 nurses 'for service with British troops or with the French Red Cross if desired'.[58] London accepted, and by the end of January the decision was made; the nurses would, of course, be escorted overseas by Maclean. Later that year she could report that, although an amendment of the Defence Act was required, 'The New Zealand Army Nursing Service has at last been formed.'[59]

Liverpool had also asked Australia if New Zealand nurses could

In their dark-grey Petone woollen cloth travelling dresses and coats and grey silk bonnets, the first 50 New Zealand Army Nursing Service nurses who left Wellington on the *Rotorua* in April 1915 looked old-fashioned even in their day. They came from all over the country.

ALEXANDER TURNBULL LIBRARY, PACOLL-0321-001

be considered for their overseas nursing contingent. On 25 March, Maclean received a cable requesting two sisters and 10 nurses to sail six days later, to join Australian nurses bound for Egypt. She hastily chose the required number from the reserve and volunteer lists, and the lucky dozen departed on 1 April 1915, a week before the first 50 left the capital.

All the women in the main NZANS group were Pākehā — no Māori nurses have been identified[60] — had at least six years of nursing experience and were single. Their average age was 27. All the women were farewelled by their own districts, with good wishes and helpful gifts. After reaching Wellington and organising their paybooks and uniforms, they received their badges at Parliament on 7 April. When she boarded the SS *Rotorua* the next morning, Mabel Crook from Palmerston North had with her 'Whisky Flask, Electric Torch, Hamper, Chocolate, books. Deck chair. Writing case in leather (officers style). Travelling Cabin Trunk. Suit case. Fountain pen. Hot water bag. Nail file. Woollen gloves, Muslin caps. Collars. Cuffs. Leather Purse bag (2). Gold Brooch. Gold chain. HRfs [handkerchiefs?]. Cushions (2). 2 blouses.' In warm Indian summer sunshine, the crowds on Wellington's Glasgow Wharf cheered as the *Rotorua* departed on the afternoon of 8 April. 'Had beautiful basket of flowers presented to me on board boat before leaving,' Crook wrote. 'Held strings of ribbon to those on wharf. Band played Tipperary, National Anthem & should old acquaintance . . . Many eyes held tears.'[61]

The nurse/orderly relationship was not always straightforward, as some NZMC men resented answering to women, but, like the patients, they more often appreciated the nurses' dedication and skill. While on night duty on the *Maheno* in Lottie Le Gallais' ward in 1915, orderly Guy Farrell wrote a letter to *Kai Tiaki* 'to draw your attention to the devoted and untiring work of our Sisters . . . one cannot fail to notice their splendid efforts to soothe the sick and wounded men . . . I shall never forget, the first few days on our initial trip to Anzac Bay . . . My poor Sister worked like a Trojan and it beats me how she kept up so long and with such frightful cases as we were getting.'[62]

Male prejudice was not absent, however. While travelling to war on the *Aparima* in 1917, Wilfred Smith told his wife, 'I have changed my opinion dear about having Nurses aboard Transports, it is only a farce because they don't do anything, but fool round with the Officers . . . and I really think that they do much more harm than good.'[63] As Claude Weston of the Wellington Infantry Battalion suggested, too, some wounded men, accustomed to being in command, could find it difficult 'to be controlled by the other sex . . . The sisters and nurses naturally like doing their work in their own way, and the soldiers have grown accustomed to insisting on everything being done as they ordain.'[64]

Gaining recognition of their rank and status proved difficult for the nurses. Despite a February 1916 directive that matrons, sisters and nurses held officer rank and were to be 'accorded the usual courtesy salute', this seldom happened,[65] and although many doctors showed respect and admiration, some foolish discrimination took place. Wellington nurse Edna Pengelly, travelling on the *Marama* from Egypt to England in June 1916, reported the putting up of a notice: '"Sisters are to have no communication with the officers on any account unless in the discharge of their duties." I suppose someone has been silly and so the whole crowd of us are to be treated in this fashion . . . There is a chalk line on the deck to divide the

above Hester Maclean (1859–1932) was a woman of extraordinary energy. As well as being matron-in-chief of the New Zealand Army Nursing Service, which she fought to establish, she was assistant inspector of hospitals for the Department of Hospitals and Charitable Aid from 1906 to 1923 and a driving force in the New Zealand Trained Nurses' Association. In 1908 she founded the nursing journal *Kai Tiaki*, which she edited until her death. She defended the rights of nurses and their status as highly trained professionals. ALEXANDER TURNBULL LIBRARY, PACOLL-0785-1-106-02

below The nurses were almost universally admired by their patients, who often described them as angels. Images of improbably clean and pretty white-clad women, with equally immaculate patients, were often used on postcards and in recruiting material. Nurses were also the subject of poetry — 'When Peter dishes out the wings, he'll say in accents terse/Now stand aside, you soldiers! Step forward Angel Nurse!' — and, as this album cover shows, symbols of romance. NATIONAL ARMY MUSEUM, 1992.1156.2

men from the women.'[66] As she wrote later, 'It is a great pity, but it seems to me that the NZMC think that the sisters have no status at all . . . Clinical machines is what we are supposed to be — or ought to be, I suppose — to please them.'[67]

Like the doctors and men of the NZMC, nurses came and went from New Zealand, as new recruits joined up and were trained, or personnel were rested or returned to their pre-1914 civilian posts. Hester Maclean and Mabel Thurston, who was matron-in-chief for the NZEF in Britain, were constantly corresponding about nurses and their situations and placements.[68] While at No. 3 New Zealand General Hospital at Codford in July 1917, Pengelly noted, 'Miss Thurston has just asked for the names of the sisters who have not yet done service, either in Egypt or in France. I expect there will be a flutter soon, as some will be going and others returning.'[69]

Orderlies had an extensive range of duties, not all of them medical. It was they who 'carried the stretchers, who wheeled patients to the operating theatre, who set trays, dished out meals, and took on the less pleasant chores connected with bedpans'. They also washed and shaved men unable to care for themselves, and carried those whose legs had been amputated.[70] As Pengelly observed, they also had to deal with criticism from patients, though 'Orderlies are a genus quite distinct by themselves, and no doubt can put up with it all'.[71] Most of them had no medical background, save their pre-war training, and their suitability varied. In Weston's view, 'some should not have been allowed near a Hospital; there are others whose steady, sure hands seem to know instinctively how pain can be avoided and where ease lies'.[72]

Not everyone was happy to be in the NZMC. In January 1915 Walter Carruthers was hoping to soon 'be able to say that I am in the infantry . . . as there is a transfer going through'. He was particularly aggrieved at 'not even being a stretcher-bearer', but 'behind the firing line altogether'. He would not advise anyone to join the ambulance: 'There is no promotion out of the N.C.O. part of the business unless you are a qualified medical man.' In July he wrote, 'I don't want to go to England to look after wounded. That's a woman's or old man's job. I'm young and hefty and would much rather be in the thick.' Carruthers eventually got his wish, entering officer training early in 1918. He was killed in action on 29 September.[73]

Doctors often got good press, and the popular men featured frequently in letters and memoirs. Dentist Arthur Logan, the only non-doctor officer in No. 1 Field Ambulance during the first year in France, considered that 'a finer lot of mates to live with under any sort of circumstances, either grave or gay it would be very hard to find'.

> I believe that Army life to the average medical man is, except of course during those periods when active military operations are taking place, a relaxation and even a rest from the worries and trials of a busy medical practice. Consequently they can, as it were, let themselves go more and be more human than is expected of them in ordinary life.
>
> With one or two notable exceptions, I always found them most unassuming and friendly and, indeed, exceptionally good company.[74]

After MO William McAra was evacuated from Gallipoli with dysentery he was pleased to be visited in hospital by James Hardie Neil: 'Just same jolly old case as ever, only very thin.'[75] At one New Zealand hospital Sister Jeanne Sinclair heard many patients say of George Home, 'This Major is no good to me, he cures us too soon!'[76] The nurses, too, had their favourites. When wartime MO Mathew Holmes, who led the medical contingent to Samoa, died of influenza in 1918, *Kai Tiaki* remembered him as 'always . . . one with whom nurses were fellow-workers, to whom he accorded their just place in either hospital or private work'.[77]

There could, however, be discontent with — and even accusations of cowardice towards — the higher ranks of the medical service, though some of this may have stemmed from hearsay and gossip, or amounted to no more than traditional grousing about the top brass. On 8 May 1915, for example, when No. 1 Field Ambulance moved from Anzac Cove to Cape Helles on Gallipoli, John Thomson noted that 'Fanny (Capt. [Ernest] Boxer) is in charge, hence much messing about'. On the 14th he wrote: 'Also heard that Col. [Charles] Begg our O.C. got some shrapnel. There were no crocodile tears shed; the unpopularity he acquired in Egypt has not been lessened by his obvious disinclination to risk his own hide.'[78]

Godley, himself the subject of considerable, and not always merited, dislike, was very hard to please when it came to medical personnel. His wartime correspondence with Allen is full of impatient and often patronising complaints, particularly about those in top administrative positions and those he thought were insufficiently tough on malingerers. Although New Zealand's medical service had 'never been worse than anybody else's', he wrote in March 1916, 'of course, one would have liked to have had them much better'. Percival Fenwick, he considered, 'had neither the administrative ability nor the strength of character to cope with the situation' and 'William Parkes, I am afraid, is by no means a strong man, and I cannot find a strong one. But he is very sincere and painstaking and does on the whole very well.'[79] Godley had promoted Parkes to deputy director of medical services (DDMS) 'simply because I could not get anyone else', and would have preferred an RAMC man.[80] In August he told Allen, 'The Chaplains and the Doctors give us more trouble than anybody else. Begg is persistently tiresome.'[81]

But all these problems, whether of organisation, training, rank or personal unsuitability, were, finally, secondary to the enormous task that lay ahead of the men of the NZMC and the women of the NZANS as New Zealand went to war.


A.F.A. 2042.
114/Gen.No./5248.

FIELD SERVICE

POST CARD.

The address only to be written on this side. If anything else is added the post card will be destroyed.

[Crown Copyright Reserved.]

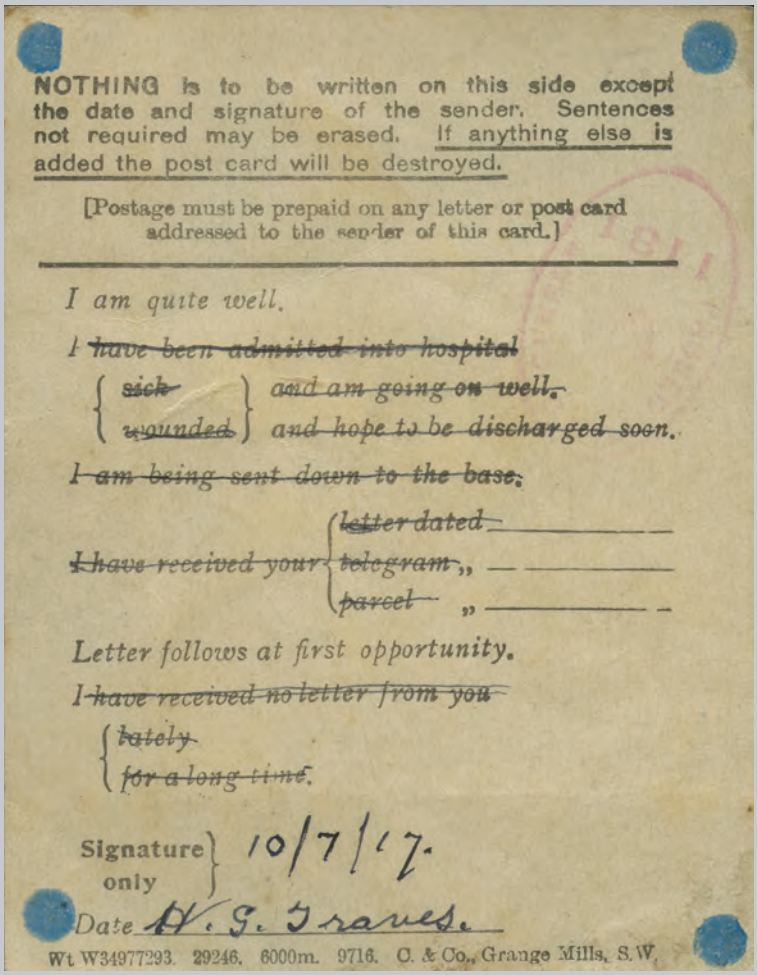
Mrs. W. Traves.
'Roslyn Terrace'
Timaru
South Island.
New Zealand.

Soldiers could use a field service card with pre-printed sentences to send those at home a quick message of reassurance without having to worry about the censoring officer. Only a date and a signature were permitted to be added. Former ploughman George Traves from Timaru sent this one home after he received gunshot wounds to both arms in September 1917. SOUTH CANTERBURY MUSEUM, L2014/005.04

REGRET TO INFORM YOU

Informing distant loved ones when men were sick or wounded was a complex task, but the government was thorough in its response. When William Smallfield was admitted to a French hospital with trench fever in August 1917, his family received a telegram from defence minister James Allen and messages from Prime Minister William Massey and his coalition partner Joseph Ward on the same day. After Wilfred Smith died of wounds on 8 October 1917, his wife Ethel received cables from both Allen and, later, the governor-general, and a letter from Mackenzie.[82]

Sending the wrong message could cause undue alarm, as could the time lag involved with letters. Nurse Mary Grigor, who survived the sinking of the *Marquette* on 23 October 1915 (see Chapter 4), wrote from Alexandria on 10 November: 'New Zealand people will, I know, be worried until they hear from those they have over here. I cabled my father when I returned here, saying I was safe and well . . . nothing was mentioned in the Home papers about the Marquette, and he did not know I was on board, so . . . he must have wondered why I cabled. However, my letter to him will explain everything.'[83] When Len Coley was wounded and gassed at Messines, he was sent to No. 22 British General Hospital near Boulogne, where he soon discovered that he had been officially reported killed. 'I knew what that meant. I was out of bed like a shot. I found a doctor, explained and got him to cable my mother in New Zealand.'[84] When William McAra performed an appendectomy on Gallipoli in July 1915, 'Capt. tried to get me to agree that it was wise to cable as boy improving & so avoid frightening his people. Told him this was a mistake as boy not out of danger & would be great shock if first they knew was that he was dead.'[85]



NOTHING is to be written on this side except the date and signature of the sender. Sentences not required may be erased. If anything else is added the post card will be destroyed.

[Postage must be prepaid on any letter or post card addressed to the sender of this card.]

I am quite well.

~~I have been admitted into hospital~~

~~sick~~ / ~~wounded~~ ~~and am going on well.~~ ~~and hope to be discharged soon.~~

~~I am being sent down to the base.~~

~~I have received your~~ ~~letter dated~~ / ~~telegram~~ „ / ~~parcel~~ „

Letter follows at first opportunity.

~~I have received no letter from you~~ ~~lately~~ / ~~for a long time.~~

Signature only 10/7/'17.

Date H. G. Graves.

Wt W34977293. 29246. 6000m. 9716. C. & Co., Grange Mills, S.W.

Because the official cabled information was, of necessity, basic, commanding officers, comrades, chaplains, and even busy doctors and nurses, also sent letters to relatives. 'I have been very busy writing,' padre Ronald Watson explained in December 1917. 'You have no idea what a difficult job it is. Still I want to do all I can, because the anxiety of relatives for all the news possible is pathetically great.'[86] When Frederick Welsh was killed on Gallipoli on 4 October 1915, two days before his twenty-first birthday, McAra wrote to his mother, Jessie, in Christchurch. The young man, ill with dysentery, was en route to a hospital ship when McAra and his ambulance men took him in for the night. Next morning, several patients were hit by Turkish shells, and 'your poor boy received a large piece of shell right into the lung. He did not suffer at all, but never rallied from the shock. He knew he was going, and smiled quite bravely at me as he told me that "he was not afraid".'[87] Such letters often blurred the truth, or lied, but Welsh did in fact die without trauma, as McAra noted in his diary: 'no pains — internal haemorrhage'.[88]

CHAPTER 3

SICK AND TIRED

THE LAST MONTHS ON THE PENINSULA

previous pages
The dangerously exposed nature of the Gallipoli environment is all too obvious in this photo of a casualty clearing station. Treatment was also increasingly compromised, as drugs and supplies became scarce. TE PAPA, O.040605

> And on reaching that war area one came to realize the magnitude and intensity of the epidemic of intestinal infections which prevailed . . . during the summer and autumn of 1915, which was causing men to be poured off on to hospital ships by the hundred, sometimes by the thousand, every week, and which was mainly epidemic dysentery.
>
> — Dr G. S. Buchanan, 'Epidemics of the Eastern Campaign', 7 December 1917

On 3 September 1914, just a month after the declaration of war and six weeks before the Main Body left New Zealand, newspapers reported the advice given soldiers to avoid 'the ravages of disease', which were 'worse than bullets'. 'Never drink any water which has not been boiled,' it stated, and 'Kill flies. Cover food'. Both 'Boils and Carbuncles' and 'Simple abrasions of the skin which fester' resulted from 'Unfitness and want of cleanliness'. It was necessary to clean the teeth daily; 'want of sleep' was apt to cause both frostbite and sunstroke.[1] The impossibility of achieving even one of these well-meant instructions would become horribly obvious on Gallipoli from late May.

As if unforeseen numbers of wounded, and treatment and evacuation challenges, had not been enough, sickness became ubiquitous as the weather grew warmer. Despite some illness, and the trials of adapting to a desert climate, the troops who had left Egypt were generally fit and well, fresh from hard training in the desert.[2] All too soon, however, there was a rapid and serious physical deterioration. By mid-June, three sick men were evacuated for every two wounded; by the end of the month, the 'wastage' from sickness was equivalent to 35 in every 1000 men per week. By this time gastrointestinal disorders, usually in the form of severe diarrhoea, had become 'almost universal'. During the week of 21 to 27 July, 223 sick New Zealanders were taken off the peninsula. Charles Hand-Newton, back on Anzac with the Mounted Field Ambulance on 23 July, put the 'alarming' sickness rate higher than that: he thought about 1000 men a week were leaving.[3] The *Dominion* listed the 54 fatalities since 1 July under the headline, 'Death from Disease, Toll of the Unseen Enemy'.[4] Gallipoli was not a healthy place.

The most widespread problem was dysentery. Caused by flies breeding on unburied corpses

and at open latrines, and by contaminated water, this reduced hundreds of previously strong men to skeletons and led to many evacuations and some deaths. As machine-gunner James Rudd recalled, 'I saw men like walking ghosts, all of a sudden excrete and then fall down in their own filth.'[5]

The other prevalent disease on the peninsula was what was generally known as enteric fever or typhoid, which by August was at epidemic level. It was, in fact, usually paratyphoid A or B, which were slightly less serious. Both typhoid and paratyphoid were caused by types of salmonella bacteria found in the blood, faeces and urine of those infected. Transmission occurred through swallowing water or food contaminated by sewage or eating food prepared by someone carrying the bacterium. Lack of water for hand-washing only accelerated the spread of this disease on the peninsula.

The typhoid/paratyphoid confusion, and lack of diagnostic accuracy, were understandable in the absence of testing. As Carbery noted, 'many of the cases were not definitely diagnosed until some time after they had reached remote hospitals in Egypt or Malta'. Apparently a mobile laboratory on Gallipoli had been considered, but not achieved.[6] British bacteriologist Adam Patrick, sent to Malta in September 1915, 'quickly realized the prevalence of dysentery and of fevers of the enteric type' and through further testing discovered a 'really extraordinary' prevalence of paratyphoid A and B. He decided that 'few men who had been on the Gallipoli Peninsula could say with certainty that they had not suffered from paratyphoid'.[7] There was blood testing on Lemnos, too, as Norman Hassell, who had had three different diagnoses of his illness from three different doctors, discovered at a sick parade. 'Take a sample of his blood, orderly!' said the colonel, and next day Hassell was put in an isolation ward: 'This man's bad with enteric!'[8]

There was some controversy regarding the New Zealand typhoid vaccine and its replacement with one that would combat the two paratyphoid strains. A high-powered Medical Advisory Committee, also known as the Sanitary Commission, organised by the War Office, was sent out in May 1915 to advise on the health of the troops in Egypt and on Gallipoli. It decided, using what turned out to be incorrect information, that the New Zealand vaccine came from 'an enfeebled strain or organism' and recommended reinoculation.[9] As Heaton Rhodes explained, however, the vaccine had 'proved efficient in New Zealand during epidemics of typhoid' and more than one make had been used. Also, the term 'enteric' was used in New Zealand Records Office material for both typhoid and paratyphoid.

Once he understood that the vaccine from New Zealand was for typhoid, but not paratyphoid A or B, and that a combined vaccine was required, Rhodes 'lost no time' in obtaining cultures of the two paratyphoid bacilli 'isolated from cases in Egypt' and sending them to New Zealand, where they were used to prepare the correct vaccine.[10] The incidence of 'enterica' decreased after the men were inoculated against paratyphoid from the end of September. In Ormond Burton's view, 'A similar campaign to that of Gallipoli, fought at any other period of history, would have ended in uncontrollable epidemics of typhoid. This was averted for the first time by the new para-typhoid injections . . . [A]lthough thousands were evacuated with abdominal disorders, few died and most of the others recovered fairly rapidly.'[11]

Men sent away sick often hated leaving their friends. When Peter Thompson was ordered to the clearing hospital on the beach on 11 May, he hoped to be back in the trenches very soon. His confidence was misplaced: he ended up on a hospital ship en route to Alexandria. 'No amount of argument,' he wrote on 14 May, 'will persuade the doctor to let me rejoin my unit.' As MO Alexander Trotter noted in August, 'I saw a Sergt. Major the other day with a severe septic throat and a temp. of 104.2 who was annoyed when I sent him off duty to the Fld. Amb. Hosp.!'[12] Some doctors had a different approach. Engineer Charles Wallace described in his diary how a very ill sergeant, the holder of a DCM, had gone to the new MO, only to be told he was malingering. The colonel was forced to command the evacuation of the sick man. 'The doctor has orders to send away as few men as possible, but it puzzles me that a man holding a Captain's rank can so blindly follow the letter of an order, when his experience tells him it is wrong. The order was never intended to keep men like A___ on the Peninsula, dying and useless.'[13]

Diet played a major role in the New Zealanders' poor health. There was enough food but it was monotonous and, as Burton pointed out, 'would not have been well balanced even in a temperate climate'.[14] A 2013 analysis showed the rations to be 'far below modern nutritional requirements for vitamin C intake' and deficient, too, in vitamins A and E. They were too low in selenium, potassium and dietary fibre, but 'excessively high' in saturated fat and sodium.[15] When Frederick Foote and his mates returned to Zeitoun after Gallipoli, they 'had little or no energy . . . I think most of us had vitamin deficiency.'[16]

In the cruel Gallipoli heat the food quickly became inedible. Heading the list of staples, mostly sent from Britain, was bully beef — stringy corned meat, minced and tinned in gelatin; the most common brand was Fray Bentos, imported from Argentina.[17] As John Russell decided, it was passable as an emergency ration, but eaten daily 'it soon became unpalatable & hard to swallow &, in the heat of the day, was in semi-liquid form & quite nauseating'.[18] Also on the roll-call of basic foodstuffs were bacon, jam, cheese ('they didn't know where the cheese came from, but some of them had a pretty fair idea'),[19] tea and a biscuit that was soon legendary for its hardness. On 1 May ambulance man John Thomson noted: 'Our rations are 7 biscuits a day, a very little each of jam, tea, sugar & a very fat chunk of bacon. There's any amount of bully beef but only because it is poor & barely eatable. Have a struggle to get satisfied.' By mid-June, he considered 'monotony and unsuitability of diet', along with the increasing heat and poor water supply, the reasons sickness was 'becoming very prevalent'.'[20]

Almost everyone had something to say about the biscuits. Len Coley thought them 'as hard as the hobs of the place parsons talk about'; Norman Hassell described them as 'great big affairs four inches square and as hard as rock. The only way to eat them was to break pieces off the corners and keep them in the mouth until they were soft enough to chew.'[21] Pulverising them was one favoured approach. With determined optimism, Trooper Len Allen told his sister that the biscuits 'were fairly hard but could be made into a very nice porridge by grinding them down to the consistency of meal'.[22] Sometimes, ground biscuits and bully beef were mixed

together to make a kind of rissole that was slightly more agreeable but not good for 'disordered tummies'.[23] Fresh meat, which arrived frozen, was issued, but, as one sanitary officer noted, because it could be cooked only in small mess tins, putrefaction frequently set in before it could be used up.[24] It was often fly-blown, too, by the time it reached the trenches. The hated Deakin's apricot 'jam', which had no nutritional value, was little more than a fly-attracting watery stickiness that could be poured out of a nail hole in the tin. It was popularly known as 'Deakin's Droppings'. Hassell recalled a ration of bread arriving every 10 days from Imbros: a loaf was divided into 10 pieces, each of which was to last one man until the next shipment. When you ran out, it was back to the biscuits. Louis Browne and his Auckland Infantry Battalion mates 'lived on bully beef and biscuits for eight weeks — [we] only had one loaf of bread and three fresh meat stews in that time'.[25] The cheese simply melted into a stinking mess.

Views on the soldiers' diet did vary. On 21 June the Melbourne *Argus* insisted that 'All the troops in Gallipoli speak enthusiastically of the food'; a canned beef and vegetable stew known as Maconochie's was 'very popular with the Australian soldiers'. Just the day before, however, New Zealander George Barclay had noted of Maconochie's that 'a good many complain of being sick after using it'.[26] In July, Colonel Arthur Bauchop considered the rations for his Otago Mounted Rifles to be 'of the most luxurious sort'. He listed, on one day, a ration of '¼ lb figs, 2 oz rice, 2 oz jam . . . ⅛ tin of milk, ¼ lb bacon, ½ lb fresh vegs, 10 oz fresh meat, 6 oz bully (days ration), 1lb bread', and mentioned occasional rum distribution and three issues of lime juice a week.[27] Very shortly after this, however, Trooper Leonard Simpson told his family, 'We very seldom see milk now, but get a tin now and again, just to let us know the taste of it. No fresh meat. Bully bacon . . . from America, bread every other day, biscuits (cabin and army), potatoes, onions, flour now and again, prunes or dates or figs now and then, tea- or lime-juice occasionally.'[28] By September, even Godley was blaming the men's illness and 'general want of spirit' largely on the food. He had the bully beef in his sights, noting, in a 10 September letter to ANZAC headquarters, that it quickly became unpalatable 'and the men prefer to do without meat rather than eat it'.[29]

There was, incontrovertibly, an almost complete absence of fresh fruit and vegetables. The latter appeared only when the men took a rest from the front line, and 'no one had the initiative to send a few light vessels round the Greek islands within easy reach, and buy up the necessary quantities'. In Burton's view, the culprit was 'a War office mentality that could only think in standard terms. If a couple of experienced New Zealand housewives had been made she-generals, and placed in charge, the results could have been very different.' Barclay, too, was mystified: 'Egypt is so close that there should be a supply of green vegetables.'[30] This lack of fresh produce led to malnutrition, gum sores, boils that became septic and 'nasty blood poisoning', which, as Godley noted, 'so many people get here if they get a scratch from the bushes'.[31]

On 12 July, Eric Catchpole 'had a boil on the right arm below the elbow and had to get it lanced, and have had my arm in a sling until yesterday'. Soon after Eric Burnett reached Anzac, he 'tapped' his left leg with the corner of a shovel. 'It only broke the skin but it would not heal up till after I had been in hospital over a month.' A few days later he 'knocked a wee bit

above The wounded man on the left, being led down a Gallipoli hill, has been tagged with a label summarising his condition and any treatment given so far. NATIONAL ARMY MUSEUM, 2001.105

below The soldier waiting outside this Gallipoli ambulance tent wears only a hat and shorts in the fierce heat. ALEXANDER TURNBULL LIBRARY, PA1-O-811-22-3

above The Red Cross flag marks the medical tent in this photo, which was originally captioned, 'At the Dardanelles: One of the Beaches'. The cramped conditions on the narrow Gallipoli shoreline are evident. CHRISTCHURCH CITY LIBRARIES, CCL PHOTOCD 3, IMG0047

below Medical staff often had little time to rest. Major Eugene O'Neill (seated left), CO of No. 1 Field Ambulance, and Major Donald Murray (seated right) take a welcome break at the foot of Walker's Ridge on Ocean Beach, Gallipoli, 1915. NATIONAL ARMY MUSEUM, 1992.742

off [his] right shin with a piece of shell'. This wound did not heal until mid-December, and then a 'tiny patch . . . broke out again & got bigger than ever'.[32] Medics were affected, too. On 1 September John Thomson reported 'a great deal of trouble with septic scratches on both hands both knees and right elbow; unable to handle a stretcher so am doing Q.M. [duties] and water fatigue.'[33] As the heat mounted the men refashioned their uniforms, tearing off the lower half of their trousers to convert them to cooler shorts and ripping the sleeves from their shirts. This exposed more of their skin to scratches that could all too quickly become infected.

Men certainly lost both appetite and weight as a result of illness, but poor food could retard their recovery. In mid-October Burnett was on a hospital ship off Lemnos, finally sent away because he had developed jaundice. The MO 'told me I badly need a holiday as I was run down & my blood was thoroughly out of order, and that I didn't stand a hope of getting right if I remained on the peninsula, as I could not get the proper diet'.[34] On 9 November, very ill with dysentery at a CCS, MO William McAra noted, 'Felt very weak, couldn't stand the horrible food they gave me.'[35] Those evacuated from Gallipoli rejoiced in their escape from the rations. When former Taihape clerk Joseph Cody was wounded on 7 August, he was taken to an Alexandria hospital, 'where everything is clean . . . not to mention eggs, butter, roast chicken etc. etc. Quite a change from bully beef, stew, bully beef without the stew, and biscuits hard as the hobs of hell, and microscopic pieces of bacon which represents breakfast, and rice — dinner, while the aforesaid B.B. — tea.'[36]

Over the first weeks the men cooked for themselves, using scarce vegetation from the hillsides to fuel their fires. Instead of resting and conserving energy, they were hunting for water and fuel and the resulting meals were often 'highly indigestible, however appetising'. The makeshift kitchens also attracted flies. 'The large open latrine was a stone's throw away on the crowded hill side, and from kitchen to latrine there was much coming and going all day by the swarming hosts of winged enemies.'[37] The lack of water meant that utensils could not be washed properly, and it was also difficult to store food in hot, dust-filled, fly-ridden dug-outs.[38] Although different food was sometimes bought during leave, and officers had access to better rations, the absence of canteens on the peninsula meant that most of the troops had no opportunity to alter their diet. A primitive canteen was established on Imbros in August, but its supplies were very limited. The Dardanelles commissioners considered that 'had canteens been made available earlier there would have been a reduction in the sickness'.[39]

Both the bully beef and the bacon were salty and thirst-provoking, completely unsuited to a hot environment where usable water was in such short supply that it had to be brought in by lighters. When Fred McKee had a shave and a wash on 29 April, he had 'almost forgotten how to do it . . . But water was scarce, even for drinking . . . by the time you had made two cups of tea and quenched your thirst during the heat of the day, there wasn't enough to clean your teeth with, let alone such luxuries as washing your face and hands.'[40] 'We are on ½ a gallon of water a day again,' wrote William Malone on 5 June.[41] As Douglas Stark (Starkie) remembered, 'The men drank their water issue and let hygiene go where it belongs in wartime. Not that you could call the water drinkable. There were two wells between the trenches and the beach, but both were reputed to be poisoned by the Turks — which left the chlorinated beach water-tanks.

The water was carted up in benzene [petrol] tins, and the men drank shandies of chlorinated lime, benzene, and water.' Desperately thirsty men 'soon learned to suck pebbles in order to promote a flow of saliva'.[42] John Thomson, who found himself 'thinking of the cold streams round Dunedin with maddening persistence', thought it best to 'drink as little as possible during the day and save as much water as possible for a drink after sundown. One is then able to sleep instead of lying awake with a dry tongue.'[43]

After arriving on the peninsula in late May, MO Thomas Ritchie was made sanitary officer for Monash Gully. Although there was 'plenty of water to be obtained by just digging for it', it had to be treated. 'There are hundreds of men buried in the valley, mostly only a foot or so below the surface, & the drainage from them must get into the shallow wells. About half this section is now supplied with water brought from Malta.' Before leaving Egypt, each MO had been given chloride of lime and some hyposulphide of sodium, but Ritchie found that 'only one or two of the medical officers in the valley had any, and all the water was being obtained from shallow wells, with the exception of one deep well'. He also observed that chlorinating water did not prevent diarrhoea.[44]

By July, drugs and other medical necessities were harder to come by, partly because some medical officers were feeding, drugging and treating sick men at battalion headquarters, 'on the off-chance of keeping up effective strength', rather than sending them to the field ambulances — these were overflowing, and Anzac had become 'one big hospital'.[45]

At the end of August a field ambulance quartermaster reminded the ADMS that he had requisitioned arrowroot, cornflour, meat extract and brandy 'every day for the last three weeks'. Because MOs could not 'obtain a supply of simple drugs such as castor oil, salts, bismuth, from the advanced supply depot of medical stores . . . many cases of sickness, especially dysentery' could not be treated on Gallipoli.[46] Stealing of supplies, especially alcohol, did not help. As ASC Captain Frank Parker observed, port wine mysteriously disappeared and cases were deliberately dropped. Percival Fenwick, too, encountered pilfering. 'I regret to say,' he wrote on 9 May, 'that when our two cases of brandy were opened, it was found that the bottles had been emptied and filled with water . . . It hurts to think of the wounded being deprived of this by the greed of a healthy man . . . A dose of brandy may just make all the difference when a man is brought in bloodless and cold all through.'[47]

Sanitation was an enormous challenge. By 27 May, the scrupulous and exacting William Malone was deeply concerned about the possibility of 'some serious epidemics of sickness. The lack of sanitation thro'out this Divn is dreadful. Things are beastly in most places. I can stand a month [of] dead and unburied corpses, but I cannot stand the filthy ways of living beings.' In a diary entry for 5 June he identified the culprits. 'The flies are becoming an awful nuisance. The area is full of them — blow flies — and the small house fly,' but 'general dirtiness' was also to blame.[48] The No. 1 Field Ambulance war diary was of the same opinion: 'it is more rare than the reverse to see men cover their excreta even though a shovel is placed at the latrines for the purpose. Empty meat tins, bits of biscuit, food refuse from meal time,

tealeaves, jam tins etc are practically always to be seen thrown about — sometimes in heaps and frequently emitting a most foul smell. Myriads of flies swarm over these plague spots breeding freely.'[49] Bathing in the sea was the only way to get clean but it was a dangerous business, with the Turks firing from above, and men were frequently wounded or killed. John Russell did not take his clothes off for the first six weeks; he had only a couple of swims.[50] During the two months that he and his men were at Quinn's Post, 'Malone became landlord and Quinn's was recognised as Wellington Property'. As well as improving and strengthening the trenches, Malone ensured that his men 'gathered rubbish daily, cooking was centralised, and the strictest standards of sanitation were enforced'.[51]

This situation, however, proved the exception rather than the rule, despite the best efforts of those in charge. As Fenwick wrote on 7 May, 'Given 25,000 men, a very limited area of ground, a poor water supply, and a large number of decaying corpses in close proximity, it is futile to ask for perfect sanitation.'[52] In Burton's words, the flies 'bit like young scorpions and savagely attacked every patch of bare skin . . . Any scrap of food or offal was soon black with them.'[53] As the toll of unburied dead mounted, and the temperature rose, the flies crawled over corpses (which also caused an intolerable stench and attracted vultures), latrines and food, carrying infection with them wherever they went. It was almost impossible for men to swallow their food without ingesting flies. Drinking was testing too. One lunchtime when Herbert Hart 'required the next swig [of his tea] I had first to rescue seventeen flies from the mug, and water is too precious for one to have been able to throw it away'.[54] Moisture was a magnet for the flies: they would cling to the men's eyes, nostrils and ears and the corners of their mouths. Letters, diaries and memoirs abound in accounts of the omnipresent insects. After Chunuk Bair, Leonard Hart found it 'pitiful to see the wounded covered with [flies] from head to foot but too weak even to attempt to chase them off'. One of the most succinct remarks came from Joseph Cody: 'The flies over there are worse than the wildest nightmare about flies you ever heard of.'[55]

By late June, the flies had become appalling. The DMS, William Birrell, made the sensible suggestions that breeding places should be identified and all rubbish quickly removed and burnt, but reduced his credibility by recommending the use of fly-papers. Four thousand of these were 'promptly indented' by a brigade commander, along with 'miles of string so as to festoon the dere'. More practical measures followed. Sanitary officers were appointed (though not always obeyed), 'scrupulous cleanliness was aimed at' in the trenches, refuse that had been disposed of 'promiscuously' was buried or incinerated, wells were controlled and some water holes put out of bounds. Ritchie recalled that the cresol issued to disinfect the water proved 'absolutely useless'.[56] The sanitary officer role was not popular. When Alexander Trotter was briefly appointed, he found it 'a most unpleasant surprise . . . I shall simply have to take it on and get blamed if the flies and dirt and sickness don't disappear.'[57] Thomson thought those responsible for sanitation were doing their best — 'the sanitary conditions are splendid considering the number of troops on such a small area' — but the flies had 'got such a start with so many unburied bodies earlier, that they are quite beyond control'.[58]

Nothing, it seemed, could stop the spread of dysentery, both amoebic and bacillary, and the

state of the latrines exacerbated the situation. Early in May, because the hillside above Anzac Cove was 'a rabbit warren of dug-outs' with no space for latrines, Fenwick suggested that 'the only safe way was to use the water's edge, at low tide'. (Ironically, 'most men had constipation for the first few days, as the bowels refused to act under the nerve shock of shelling'. He put the few cases of diarrhoea down to 'impure water near the trenches'.)[59] The small trench latrines that were dug were not popular when the beach was heavily shelled. Latrines became the focus of much attention and discussion, though no type was proof against germs. They were, of course, 'always crowded and many a poor devil could not find a seat. The main latrine at Anzac was a deep trench 6 feet deep and about 20 feet long with trestles at either end which supported the iron pipe we used to perch on. The bottom of the latrine was one seething mass of maggots which rapidly developed into flies by the countless millions.'[60]

Adam Sangster, serving with the Wellington Mounted Rifles, thought 'the hygiene in the trench up on Walker's Ridge was pretty primitive . . . The men with diarrhoea and dysentery had to sit on this rail and you had to be really careful or you'd go over backwards. The flies would come up, crawling over your bare behind!' Many men were 'so weak they fell in and couldn't get out'; others were made so desperate by the pain and indignity of dysentery that they deliberately went to the latrine when Turkish snipers were active. Instead of crouching and running, as most did, 'they'd stand up . . . so the sniper could shoot them'.[61]

There are as many accounts of dysentery as there are of flies and heat and thirst. Auckland schoolteacher Joe Gasparich was among the many 'afflicted with this frightful sickness'. He was initially given 'a "light diet" of preserved milk & cornflour but the trouble grew steadily worse until I felt that my whole alimentary tract was on fire & was periodically being torn from me'.[62] (Flour, cornflour and oatmeal were all common treatments for dysentery, as were milk and arrowroot.) Gasparich was sent to Imbros, where he was 'housed in a great marquee with dozens of others in like state. We slept on the ground.' Despite their condition, the patients were fed ordinary rations, such as stew and tea, 'which we endeavoured to eat hoping to restore our fading strength'. Unsurprisingly, this 'treatment' only made matters worse and compelled sufferers to make agonising hourly visits to open latrines. 'Some men were so weak that they crawled to the latrines & stayed there until they died.'[63]

When Norman Hassell contracted dysentery in September, he tried to cure himself with 'a paste of flour and water, but after a few more days and nights of haunting the latrines I got too bad to even walk about, so I went over to the 1st Australian Field Hospital and asked for treatment'. Put on the floor on an army stretcher with a couple of blankets, he was visited during the night by a doctor, 'who kept sticking a thermometer in my mouth. What I wanted was a cork somewhere else!' After being told he had 'a touch of the "flu"', Hassell left for the clearing station some 500 yards away but lost consciousness and eventually came to on a stretcher on the beach. He ended up in a Canadian hospital at Mudros. 'My stomach, in spite of all the dysentery was swollen to an enormous size and hard as iron. The doctors used to press their thumbs all over it, but couldn't even make a dent in the flesh!'

After 15 days of consuming only a 'pint of hot milk every three or four hours', his stomach returned to normal and he was 'heartily sick of milk'. After another fortnight, and a blood

test, he was transferred to a nearby convalescent camp and then to a British hospital before going on to the New Zealand Convalescent Camp at Hornchurch.[64] Henry Clark was also sent to England with severe dysentery: 'the sight of milk almost makes me sick & to think that could I have obtained a little of the beastly stuff on Gallipoli I would willingly have given all my pay & would not have been in my present state'.[65]

Nurse Kate Barnitt from New Plymouth was in charge of the main dysentery ward at No. 15 General Hospital in Alexandria from July 1915. 'The poor fellows from the Peninsular who had the disease twelve and fourteen days and some a longer period still before we received them had a fearful time. They were very emaciated, they had agonizing abdominal pain — distressing tenesmus [cramping rectal pain] — painful and continuous hiccough, frequent vomiting, and the very bad cases hemorrhage; that is more than the ordinary dysentery hemorrhage.' Diet was 'the feature of the treatment', but also used were emetin or anti-dysenteric serum, bowel irrigations, and morphine injections and turpentine poultices for pain.[66] In late September William McAra was trying injections for dysentery and achieved the best results with castor oil and Dover's powder, a drug containing ipecacuanha and opium that was used to relieve pain and induce perspiration. 'Once blood starts to come nothing much good & think they should be given sea-trip at once . . . Been string of stretchers going down to collecting hospital all morning, mostly dysentery.'[67]

The medical personnel were not immune to sickness and exhaustion. On 9 June, Percival Fenwick was 'so thin and so feeble that a few yards walk makes me feel almost collapsed and [I] want to fall down'. By 20 June, he was on his way to Lemnos, 'horribly conscience-stricken' to be leaving but 'as I fall down when I try to run, and get stupid with headache and fever, I suppose I am not much good ashore'.[68] On 27 July field ambulance man John Thomson reported sick with gastric enteritis; by 2 August he seemed 'alright'. 'Diet was arrowroot two meals, rice one with no milk & precious little sugar. It is high time something better was done in this line as the Company is daily dropping in strength from sickness.'[69] On 23 September Kenneth Tapper had suffered from diarrhoea for four days. As his friend and fellow MO McAra recorded, 'Says he can't lie as he has to go his round but feels alright when lying.' When Tapper finally left Gallipoli on 19 October, 'he looked very white & weak — almost on the verge of collapse'. McAra himself contracted dysentery a few weeks later. 'Bad abdominal pain all forenoon, which became so severe that hadn't time to dodge for latrine with disastrous results.' When he reached a CCS, the 'headache seemed worse & they gave me bromides without avail while dysentery went on increasing'.[70]

The stretcher-bearers suffered too. During the assault on Chunuk Bair, Ormond Burton and fellow No. 1 Field Ambulance man Laurie Bell 'dug in under the lee of a projecting shoulder of the Dere. It would be more accurate to say that we 'scratched' in, for neither of us, badly weakened by dysentery, could really swing a pick . . . It was a miserable life. Every few minutes we seemed to have to stagger off to the latrines.' They had to keep working, however, answering the calls for a stretcher party, and making 'a painful journey' down to the CCS.[71] By the end of August, so many NZMC men had been evacuated sick that the two New Zealand field ambulances could muster only seven officers and 74 men.[72]

The sickness on Gallipoli was bad, but it could have been worse. As Egypt had been, and the Western Front would be, the peninsula was home to lice, and their bite could transmit typhus. 'They were,' wrote Burton, 'beasts of prey and of a voracious and ferocious nature . . . They moved slowly, deliberately, surely. They could not jump or fly but they could crawl and they moved with a certain cold, passionless persistence in quest of blood.'[73] Keating's powder, which claimed to 'kill with Ease, Bugs & Beetles, Moths & Fleas', made no impression on them, and nor did attempts to drown them. Only squashing between thumb and index finger killed them, but, as John Russell put it, they 'multiplied at an alarming rate, & those that hatched during the hours of darkness were . . . proud grandparents by the following evening'.[74] Uniforms were not reduced solely because of the heat: less clothing meant fewer seams, favoured gathering places for lice.

Another potential health hazard that did not eventuate was cholera. When Fenwick heard in early May that 2000 Turks were suffering from dysentery, he feared that it might be more serious. 'If this should be cholera it will be a bad thing for us, as we must get water if we advance, and our men are horribly disobedient about drinking water without medical examination.' On 8 June, cholera remained his 'great dread'. He had spoken about it 'again and again . . . and Col. Manders has to my knowledge applied several times for more water disinfectants without result'.[75] By early July, however, Godley was telling Allen that 'we are just beginning voluntary inoculation for cholera. They do not know enough about it to make it compulsory, but we hear that the Turks have all been done, and the results are evidently good.' In August, future DSO and MC recipient Frank Turnbull wrote to his mother from an Egyptian hospital, 'I don't think I told you that . . . we were inoculated . . . two or three weeks ago against cholera, so we are well protected from disease.' Doctors protected themselves: on 3 July Thomas Ritchie gave himself the second inoculation against cholera. John Thomson reported 'a little digestive trouble', for himself and others, after the injections.[76]

As early as 25 July Trotter was frustrated by the desperate situation at Anzac.

> Nearly every man there is sick now worse than at Helles where there is a little room to move about . . . It is to be sincerely hoped that something will be done . . . before sickness still further saps the strength and fighting powers of our men. It is a painful sight every evening to see the sick coming in — drawn and haggard faces, dull eyes and gaunt bodies eloquent of utter fatigue. It has been like this for weeks and weeks and weeks: nothing is being done and the time when rough weather begins is drawing closer . . . What are they waiting for?[77]

By the end of August Hand-Newton, who had headed the MFA since Thomas's death, was 'passing a very large number of sick and wounded through our station, and evacuating them as soon as possible as our accommodation, of course, is very limited and the staff so depleted'. Even those not suffering from dysentery were 'emaciated, haggard and absolutely dispirited'.[78] During the month the New Zealand Field Ambulance had admitted 1693 sick and 1435

Inoculation against cholera in July and August— also given to Indian troops — saved the New Zealanders from a further epidemic of disease. ALEXANDER TURNBULL LIBRARY, PA1-O-573-37-3

Photographed above North Beach, with The Sphinx and the main route to Walker's Ridge in the background, this group under the Red Cross flag consists at least partly of Medical Corps men. Their names are listed as [Daniel?] Hickey, [James?] Jackson, Barbour, Brown, Wilson, [Francis?] Eagle, and [John?] Austin.

ALEXANDER TURNBULL LIBRARY, PA1-O-573-29-4

wounded. By the 31st, the Anzac sickness 'wastage' stood at 100 per 1000, or 2578 men, per week. In the first few days of September, 2292 of the 25,175 Anzac troops on Gallipoli were evacuated sick. Disease continued to take its toll in an insanitary environment; exhausted and weakened men were much more prone to infection than fit ones. In an attempt to improve the situation, 'rest stations', sometimes rather grandly referred to as hospitals, were set up in the field ambulances. These amounted to little more than 'a few bell tents' to which the sick brought their own blankets, greatcoats and groundsheets; sometimes a stretcher was available, but most lay on the bare earth.[79] When Herbert Hart returned to Gallipoli on 6 September after a stay in hospital in England, he found his battalion at 'one fourth its correct strength . . . nearly all the men have been wounded, recovered, and returned to duty, like myself. I found everyone very bronzed, thin and most them have a listless, weary, strained look in their eyes. 50% of the men are suffering from diarrhoea and are being sent away in bunches of 7 to 10 everyday, mainly from this cause.'[80]

On 15 September, 900 New Zealand troops were sent from Gallipoli to Sarpi camp on Lemnos for a rest. Charles Hand-Newton and the MFA had arrived a few weeks earlier to run a hospital and inoculate as many men as possible against typhoid. Although the weary soldiers were glad of a respite from the constant noise and sleeplessness, the windswept island was neither welcoming nor well organised. Sarpi 'camp' consisted of a few marquees, and the island's many hospitals and convalescent camps were poorly run and resourced. Clothing and beds, for both the sick and the 'well', were in short supply. Although initially the food was little better than the Gallipoli fodder, once they were paid — for the first time since the landing — the men had access to such treats as grapes and chocolate, and even fresh meat, eggs and condensed milk. But this unaccustomed luxury, and the sudden release from months of tension, combined to make many already severely debilitated men sick. There was, however, a gradual improvement in health, thanks to better food, rest and training. By early November, strengthened by fresh reinforcements from home, the New Zealanders were back on the peninsula.

The strain of the campaign had told on the medical staff as well as on their patients. As early as 27 May, Percival Fenwick had confided to his diary 'a desperate desire to get away for a few days' rest and sleep. The sight of so many men being hit is very saddening and I don't get used to it . . . I believe we are all suffering from nerve strain. It is want of sleep that hits myself hardest.'[81] As Christopher Pugsley has

The steep Gallipoli hillsides made bringing the wounded down to the beach a challenging undertaking for the overworked stretcher-bearers. The task was made harder by heat and illness. ALEXANDER TURNBULL LIBRARY, 1/2-000577-G

pointed out, 'There was no rest for anyone at Anzac . . . The flies and heat made sleep during the day impossible and the men were always on call to reinforce the line.'[82] Stretcher-bearers were constantly woken for duty. On 12 September, John Thomson at No. 1 Field Ambulance reported: 'Out of the 72 bearers, and some reinforcements of the two sections, all we can raise for duty are 12 . . . Godley is probably largely concerned in keeping us here as he has been blowing up M.O.s for evacuating so many sick men. None of the patients here are fit for further service, nor are any but two or three of our own company.'[83]

Man and mule power, when possible, were the only ways to get supplies and equipment to the front line. Sergeant Charles Warwood of the NZMC, who would die of enteric on 2 October 1915, wrote his last letter home to his mother in Christchurch on 5 August: 'My word, this is some country for alpine climbers. If a fellow is really fond of a stiff climb (under a scorching sun), I can give him all he wants in an afternoon here; it would last him for years. It would add greatly to his enjoyment if he carried a three-gallon can of water in each hand, or a large bundle of stores or ammunition.'[84]

Other factors affected the men's health. One was the amount of gear they were forced to carry. Estimates of weight varied. Writing from Zeitoun on 9 April 1915, Cecil Malthus noted that the 'total weight carried is up to seventy pounds now'. Just before the 25 April landing, Malone reported that the men would be carrying 'close on 75lbs'. Jack Moller thought 'all the equipment, blankets and overcoats [weighed] about 90 pounds'.[85] Some of the medical staff were even more burdened, forced to also carry first-aid kits and stretchers. Unfamiliar and uncomfortable, too, for some was constant shooting with a heavy Lee Enfield. 'My shoulder is aching from firing my rifle at them [the Turks],' Gordon Harper told his mother in July, 'but we are keeping them quiet.' There was little awareness then of the dangers of constant exposure to the sun, although the doctors warned against sunstroke. 'My head gave me fits all day,' wrote engineer Charles Wallace on 18 June, 'and, in the afternoon, I had to stop in my dugout — I could hardly see for the throbbing. Although I had only 6 hours sleep in the last 48 hours, I couldn't even sleep. The Doctor gave me several "Aspirin's" and told me I had caught the sun.'[86]

As the weather finally grew cooler, the flies retreated, but the sickness was not over: an outbreak of jaundice began in October and grew more severe in mid-November. On the 12th, when the *Maheno* was at Anzac for the last time, she was carrying 'nearly all medical cases — 63 jaundice almost all following dysentery'.[87] Then, at the end of that already wintry month, came a fierce blizzard. There had been heavy rain for several days, but the 28th brought snow and viciously low temperatures. Charles Hand-Newton, who had returned to Anzac with his men on 10 November and fitted up a hospital in a 'regular cave' that had been excavated on an 'excellent protected site', wrote that 'the wind was very cold and cut like a knife'.[88] Trenches were soon waterlogged and the slush and snow, which later froze, made any movement treacherous. The roaring gale put paid to vessel–shore communication, and there was no hospital ship in the bay, so sick and wounded, including frostbite victims, could not be evacuated until the 30th.

Determined efforts by the medical officers, 'and a providential issue of gum boots', largely helped to prevent, for the Kiwis and Australians, the severe frostbite and 'several cases of gangrene of the feet' that afflicted the Indian troops on the peninsula. Exposure, and drowning in water-filled trenches, killed many Turks and British.[89] NZMC orderly Walter Carruthers was 'living right down on the beach' when a severe thunderstorm meant 'all my dressings and bandages, etc., got soaking wet'.[90] The storm also hampered the arrival of food and water. Shortage of the latter made useless the only Thresh steriliser at Anzac, which was steam-powered. Without a regular supply of fresh bread, the men were forced to resort to half-rations of the hated biscuits, which were a scourge for the many stricken with gingivitis and other dental problems. Weight loss became common and the number of sick being evacuated rose at the beginning of December.

All this, however, was about to change. The men struggling in the freezing temperatures, and bracing themselves for a hard winter, were not privy to the decision-making under way at the highest levels. The British command was already considering evacuation and after a visit to the peninsula in mid-November, army head Lord Kitchener told ANZAC commander General William Birdwood to prepare, clandestinely, a departure plan. Rumours of evacuation began to circulate, especially as men, guns and equipment left and routines changed. On 11 December the MFA was ordered to evacuate from its hospital all cases except those who would be fit to rejoin their regiment within 24 hours; next day they were 'told secretly to be ready to embark at any moment'. By the 13th, Hand-Newton could note in his diary that the evacuation was 'proceeding steadily',[91] though Godley did not make the final announcement until 15 December.

As well as the sick and wounded, there were some 20 medical units, New Zealand and Australian, to be got off the peninsula, including the New Zealand Dental Hospital. On 12 December, the tent subdivisions of the New Zealand and Australian field ambulances were closed, and the 16th CCS, the Australian Stationary Hospital and three field ambulances embarked. The almost 1000 sick men on the peninsula were taken out to a waiting hospital ship. On that and each following night, some 2000 men left, 'with a proportion of medical units'.[92] By the 18th there were still field ambulance men on the peninsula with the remaining troops, plus two Australian CCSs at Walker's Ridge, to care for the serious casualties expected if the small rearguard there was discovered and attacked by the Turks. As Hand-Newton recorded in his diary that day, 'The whole position now seems absolutely deserted, and hardly a man or mule passes our dressing station.'[93]

The CCSs had accommodation for 2000 cases and sufficient medical supplies, comforts, food and water for 14 days. If these medics had to stay behind to care for wounded, they would be working under the protection of the Geneva Convention. At Anzac itself were 30 field ambulance stretcher-bearers who, with RMOs, would look after any wounded who could not be taken off the peninsula on the final night. The field ambulance tents and the dressing stations, containing blankets, lights, dressings, drugs, food and water, were left standing, their Red Cross flags fluttering as usual.

But the Turks never caught on. With no unusual transport or hospital ship activity in the

bay, they had no reason to be suspicious. The rearguard was not in danger, and on the night of the 18th the last New Zealand and Australian ambulance men left safely at 7.20 p.m. As Hand-Newton wrote, 'we silently left our camp, leaving our fires burning'. The wharf from which they departed was 'covered with sacking to dull the footsteps'.[94] Transported by the armoured landing craft or 'beetles' that would remove the last troops the next night, the ambulance men soon safely boarded HMS *Mars*, where 'the officers, especially the surgeon, gave them a hearty welcome, a very good supper, and found them a place to bunk in'.[95] As Herbert Hart recorded in his diary, the abandoned medical facilities served one good last purpose. About 1 a.m. on the morning of the 20th, he and his companions 'drifted over' to one mess 'and made a fine supper . . . incidentally picking up some pyjamas each, a few cigars, cutlery and other useful articles'.[96]

Of the approximately 18,000 New Zealanders who had struggled through this cruel campaign, some 2779 were dead out of a total of about 8000 casualties.[97] The men of the NZMC had worked hard and bravely to help and save as many as they could, but so much was against them — poor medical evacuation arrangements, a hostile environment, shortage of personnel and supplies. At the end, some things seemed sadly the same. NZMC orderly Walter Carruthers left Gallipoli on 14 December and found himself on a German ship, the *Achaia*, at Lemnos. 'I had a bit of trouble getting my medical stuff on board and find that I am the only Medical Orderly . . . and that there is no Doctor, which should not be so as we have about 500 men on board. This ship is the limit . . . We are sleeping everywhere and getting practically nothing to eat.'[98]