

A disease deadlier than war

Geoffrey W Rice

It is now a truism among historians that before the 20th Century far more people died in wartime from disease than from combat. Down the centuries the so-called ‘camp fevers’ of typhus and typhoid had been the big killers of all large armies, along with smallpox, while scurvy had decimated the sailors.¹

During the Crimean War (1854–6) ten times more British soldiers died from dysentery than from enemy fire. The bacteriological revolution pioneered by Pasteur and Koch revolutionised human understanding of major epidemic diseases and enabled effective prevention of most of them by inoculation. Japan was the first country to apply this new knowledge. Routine inoculation against typhoid, smallpox and tetanus, along with delousing to prevent typhus, reduced Japanese deaths from disease in the Russo-Japanese War of 1904–6 to less than a quarter of deaths from enemy action.²

The British Army was much slower to respond, as seen during the Boer War in South Africa (1899–1902). Official figures show that five times as many British soldiers died from disease in this conflict as were killed in action or died from wounds. A deadly outbreak of typhoid after the capture of Bloemfontein in March 1900 prompted sweeping reforms in sanitation and hospital organisation.³ These lessons were applied by the British Army during the First World War with spectacular success. Regular delousing and proper sanitation reduced the rates of sickness to very low levels and kept the old ‘camp fevers’ at bay. One New Zealand medical officer, when asked what he would remember most about the war, replied that it would be the smell of chlorine-based disinfectants.⁴

Yet in the last year of this healthiest of wars the world was swept by its worst-ever influenza pandemic, which returned in a third wave in the first year of peace. Australia kept out the severe second wave by maritime quarantine, but suffered from the third wave, so this pandemic is known to Australians as the 1919 flu.⁵ New Zealand, by contrast, had a shorter but much sharper outbreak, with over 8500 deaths recorded between late October and early December 1918. Māori deaths accounted for almost a quarter of this total, at a death rate seven times that of the Pākehā (New Zealand European) population.⁶

Military personnel were at greater risk of death in this pandemic because they were in the most susceptible age-group, as young adult males, and they were concentrated in training camps and barracks where infection could spread rapidly. Yet civilian deaths from the flu pandemic far outstripped the military deaths of the First World War.

The latest figures from Wikipedia suggest 10 million military deaths, two-thirds of these from combat, whereas the global death toll from influenza across 1918–20 has been estimated at between 50 and 100 million, or 3 to 5% of the world’s population at that time.⁷

New Zealand's military personnel suffered serious losses in the 1918 influenza pandemic, and the article by Jennifer Summers, Dennis Shanks, Michael Baker and Nick Wilson, in this issue of the *NZMJ*,⁸ adds a significant new chapter to the story of New Zealand's experience of this pandemic.

They have applied the methodology of modern epidemiology to a much more accurate database of victims than was available at the time when I first wrote *Black November*, including the updated NZEF Roll of Honour and the Cenotaph database at the Auckland Museum.

Back then I could only thumb through the bound volumes of New Zealand military deaths held in the office of the Registrar-General in Lower Hutt, trying to count all deaths from influenza, pneumonia and respiratory causes within the pandemic period of late 1918. I was well aware at the time that some of the deaths attributed simply to 'Sickness' might be flu victims, but I had no way of checking them. Nor did I have the means to pursue New Zealand soldiers who had died overseas.

In the course of research for her recently-conferred PhD thesis, Jennifer Summers had access to individual military files and has been able to confirm specific causes of death. She also extended her search to UK sources, finding yet more New Zealand soldiers who died from influenza in British military hospitals. I am pleased but not surprised that she has found another 258 flu-related military deaths to add to my provisional figures in *Black November*. This finding brings the grand total of New Zealanders who died in the 1918 pandemic to 8831.

This is an important new finding, the result of careful and painstaking archival research. Interpretation of the results has benefitted from the methodology developed by Professor Dennis Shanks in his work on influenza deaths in the Australian armed forces.⁹ New recruits, men from rural backgrounds, and Māori were most at risk of dying from the flu in the NZEF in 1918.

These new figures establish that pandemic influenza accounted for 5.1% of all NZEF deaths in the First World War. This is remarkably close to the percentage of flu deaths in the Māori population. Since many Māori deaths were never registered in 1918, my own estimate of Māori mortality, augmented by newspaper reports, erred on the side of caution.

It is quite possible that the actual number of Māori deaths (which will never be known, for simple lack of evidence) would push the grand total of New Zealanders who died in the 1918 flu over the 9000 mark. This remains our worst disease-disaster so far. Understanding what happened in 1918, and how the country responded, holds valuable lessons for dealing with a future pandemic threat.

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