“That’s how quickly it happened. They disappeared from the face of the earth.”
William H. Sardo, Jr.

While the military battles of World War I struck fear into the hearts of millions, a dangerous enemy was silently killing thousands of soldiers. As Carol Byerly has written, a disease attacked Allied and German armies with “equal virulence, filling field hospitals and transport trains with weak, feverish men all along the Western Front.”¹ This enemy, a deadly strain of the influenza virus, used the conditions of war to spread its tragic effects, claiming the lives of more soldiers than died on the battlefields of France.² The disease spread in waves, mild at first in the Spring of 1918, and then, after it mutated to a deadly strain, resurging in the Fall of 1918. On the Western Front, an estimated 40% of soldiers suffered the effects of the influenza virus.³ Despite the devastating effects of the pandemic, however, government officials and military leaders argued that they could not stop the fighting “on account of Spanish or any other type of influenza.”⁴ Their denial only compounded the drastic effects of the disease in the military. American troop ships, carrying thousands of soldiers, continued to head to France. There the flu attacked at the height of the St. Mihiel and Meuse-Argonne offensives, wreaking havoc in the military camps and hospitals.⁵ Clearly, the fight against influenza paled in comparison to active warfare. The devastating effect of the pandemic was only realized after the conclusion of the war.

“SPANISH FLU”

The 1918 influenza virus was widely referred to as the “Spanish Flu” or the “Spanish Lady” because of the original misattribution of the disease. In order to bolster morale and war support, the countries at war censored the media from reporting on their losses from the pandemic. Spain, neutral in the war, lacked media censorship. Therefore, it was the first country to report the disease and the public soon attributed the outbreak to the Spanish.⁶ The origins of the disease in Europe remain unclear; some speculate that it started in a crowded British military base at Étaples, at the coast of Northern France.⁷ Others thought that it started at a United States of America military base in Kansas. Wherever it started, the disease spread quickly due to the poor hygienic conditions of trench warfare and the close human proximity of military camps.

As early as 1916, cases of “purulent bronchitis” with similar symptoms to the 1918 influenza virus appeared on the Western Front. According to one report, the cases first appeared in British soldiers in Northern France during 1916 and 1917. The disease was acute, febrile and fatal. At the peak of the outbreak in February through March of 1917, forty-five percent of the casualties in Northern France had signs of this “purulent bronchitis.”⁸ However, as Winter slowly gave way to Spring, the number of cases decreased significantly. A majority of “purulent bronchitis” cases also presented with pneumococcus strains (a century later, an analysis of genomic data showed that strains of “purulent bronchitis” and the 1918 influenza virus were similar, giving credence to the argument that the cases of 1916 purulent bronchitis in Northern France may have been a milder strain of the influenza virus of 1918).⁹

The strain that resurfaced in the Fall of 1918 was deadly. Symptoms included respiratory failure with bleeding from the lungs and upper respiratory system, high fevers, shaking chills and severe body aches. Unique
to this virus, pockets of air formed subcutaneously (crepitus) that made sounds similar to “Rice Krispies” when a patient turned on their side. The high mortality rate for young soldiers can be explained through a “cytokine storm”—an overreaction of the body’s natural immune system. White blood cells flood the body in an inflammatory response; those with strong immune systems are more likely to undergo cytokine storms, which correlates to the millions of casualties of young soldiers on the Western Front.

**THE MEDIA RESPONSE**

During the Spring of 1918, the media first reported cases of influenza on the Western Front among German soldiers, noting that attempts to prevent the spread of the disease by creating man-made barriers were ineffective. In fact, the German soldiers nicknamed the disease “Blitzkatarrh” because of its ability to affect them with the same severity as it did the soldiers on the other side of the barrier. Indeed, the virus attacked approximately 2,000 French soldiers during a German offensive in late May 1918.10

Without truthful accounts of the severity of the pandemic on the Western Front, the United States of America’s media published government propaganda about the causes of the outbreak. Pressured by the government to bolster support for the war, many media outlets portrayed Germany as an enemy that would harm civilians as well as soldiers. Thus, American newspapers specifically targeted the German pharmaceutical company, Bayer, because of the commercial availability of Bayer aspirin in the American marketplace. The media conjectured that German pharmaceuticals may have added dangerous chemicals to the drug to poison the American public, thus blaming the drug, rather than the virus, as the cause of symptoms. In fact, because of the propaganda, the Director of the New York City’s Food and Drug Inspection, B.R. Hart, asked the United States of America Public Health Service to run laboratory tests on 200 randomly selected aspirin tablets. Although no harmful chemicals were found in the drugs, the American public stood behind the fictitious claim, fueling their support for the war.11

**THE MEDICAL RESPONSE**

The medical response to the influenza pandemic on the Western Front was complicated by the fact that the worst of the scourge coincided with the Meuse-Argonne offensive in France and Belgium, one of the deadliest campaigns of the war. Mass influxes of casualties from the battlefields demanded physicians’ attention. Already stretched thin and operating round the clock, military physicians now had to deal with the flu when train loads of feverish, critically ill soldiers arrived at the base hospitals a few miles from the front lines. Isolating the sick from the injured was of critical importance and physicians ordered that separate wards (including tents) to be used to house those with influenza. Inside the wards, each cot was screened with sheets. Using gauze face masks and washing their hands frequently, physicians tried to minimize the spread of the disease. They ordered sponging and aspirin for fevers, soups and teas for hydration, digitalis for heart failure, and oxygen when needed. There were no anti-viral medications and no antibiotics.12

**THE NURSING RESPONSE**

Katherine Anne Porter, an American journalist, stated in her fictional account of the pandemic that nursing was “nine-tenths” of caring for those with influenza.13 She was correct. Skilled nursing was key to the soldiers’ survival, and the nurses fought to save lives by closely following physicians’ orders to sponge feverish patients, give them liquid nourishment, and administer morphine, digitalis and oxygen as required. Rotating shifts and assignments between the surgical and the medical tents, Army nurses cared for patients round the clock in the fifty base hospitals set up behind the Western Front.

Nurses were not immune to the effects of the virus, despite their use of gauze masks and isolation tents to prevent its spread. A nurse affiliated with the Catholic Church on the Western Front reported in her diary that “Sister S. [was] in bed with influenza”, and “there [was] a universal undercurrent of feeling that enormous sacrifices will have to be made.”14 The constant contact with patients infected with influenza facilitated the spread of the disease to nurses. Everyday responsibilities included changing bed linens, interacting with sick patients and cleaning contaminated medical supplies. Especially because the care for influenza during the time period was quarantine and a focus on personal hygiene, all of these activities had the ability to increase the chances of nurses contracting influenza on the Western Front. With the incorporation of mandatory masks by the Red Cross, this rate of transmission to medical personnel slowed; however, the risks of contracting the virus remained for those who worked in close proximity to patients with the infection.15

Along with work on the Western Front, nurses also
helped to protect and assist the public on the home front from the influenza outbreak. The soldiers, who returned or visited their homes, spread the disease to those not directly involved in the war. The spread of the disease to American military camps also facilitated the extension of the virus to the home front. Nurses helped to enforce the policy of wearing cloth masks in public areas, started by Red Cross workers in Spain. Posters in America displayed a Red Cross Nurse with a cloth mask and the message “To Prevent Influenza! Do not take any person’s breath.”

CONCLUSION

The 1918 influenza pandemic coincided with the military advances on the front lines of World War I. There, the close proximity of soldiers in military encampments as well as the unhygienic conditions of trench warfare facilitated the rapid spread of the highly contagious disease. The media, controlled by the Germans and Allies alike, prevented accurate reporting of the staggering high numbers of casualties caused by the disease; neither side wanted to admit a weakness in manpower. Military physicians worked to combat the spread of the disease on the Western Front; however, the viral nature of the disease and the lack of curative medicines necessitated a reliance on nursing care to promote healing. Working to the best of their ability, physicians and nurses collaborated in an attempt to mitigate the effects of the deadly virus. Despite those efforts, the American Expeditionary Forces alone saw more than 360,000 cases of the flu, many of them fatal. By 11 October 1918, more than 6,000 American soldiers had died of the flu on French soil. By the signing of the armistice on 11 November 1918, thousands more had joined them. In the end, influenza killed more soldiers than did the effects of combat.

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