Andres Abarca, Axel Gomez, and Erick Merlan Ms. Park and Ms. Salas Mendez Summer Enrichment 23 July 2014

Civil War Medical Care

Seeing a bullet impact the body or being wounded are horrific experiences seen on a battlefield. The most death-riddled battlefields in American history occurred during the American Civil War. Many of these brave soldiers were injured badly. Some of them even had an arm or a leg blown off. Many of the soldiers did not make it. In these times, the only hope that a wounded or dying soldier could have was the army medic and his medical tools. Tools and surgeons were lifesavers during these critical times at war. The Civil War was fought from 1861 to 1865. White Southerners who supported slavery declared their independence from the United States of America and formed the Confederate States of America. The states that remained loyal to the American government were known as the Union while the states that rebelled were called the Confederates. Approximately 620,000 soldiers died in the war, which led many to call it the bloodiest war in American history. The loss of life in the Civil War is higher than all other wars in American history. Many of these soldiers died because of new illnesses they had never experienced in their lifetimes. Other soldiers died from infected tools the surgeons used in surgery or after surgery. During the Civil War, army medics were called surgeons. They were responsible for treating the sick and the wounded. Often there would be many wounded soldiers on both sides. At one of the bloodiest battles called Gettysburg, there were so many soldiers wounded that there were not enough surgeons to help the injured. As a result, limits were placed on how many soldiers could be treated at one time. The rest of the soldiers had to wait their turn

on the surgeon's table. Some of the soldiers died because of waiting outside for the medic. Due to the large numbers of deaths and injuries, medical knowledge and experience grew quickly thanks to the Civil War. This resulted in new innovations and ideas in the area of medicine to help treat soldiers more effectively. It was these medical advances that had a very big impact on the American Civil War and on modern-day medicine.

There were many ways to save a soldier's life during the war but the oldest and more dangerous one was amputation. There were way too many soldiers injured, but surgeons found a quicker way to help save a life. Amputation was a technique where a surgeon would have to cut off a body part from a wounded soldier in order to save his life. Amputations prevented infections from spreading to the rest of the body. One specific example would be Private George W. Lemon who was shot in the leg at the battle of the Wilderness on May 5, 1864. According to the U.S. National Library of Medicine, "He was captured by Confederate soldiers and did not receive treatment for his injuries until he was freed by Union forces over a week later. For more than a year he suffered repeated infections in the wound and poor health, until Surgeon Edwin Bentley amputated the limb. The soldier made a full recovery and was fitted with an artificial leg in 1868." Amputation was such a great idea that it saved more lives than any other technique. Surgeons had to help a wounded soldier in need of desperate help. Battlefield surgeons took no more than six minutes to finish the amputation procedure. This procedure first began to be used in the American Civil War and is still used today. Thanks to the amputation procedure, many soldiers' lives were saved.

Another medical innovation in the Civil war was the use of administering chloroform through an inhaler. In 1863, General Jackson was shot in the arm from friendly fire. His surgeon recommended to remove his left arm. The common technique of soaking a handkerchief with chloroform was not going to do the job so a medic by the name of Dr. Julian found a way to solve this issue. He invented a 2.5 inch tube inhaler. The Chloroform was mixed into the air as the patient inhaled through the tube in order to be feel relaxed and allow the medication to do its job. According to the Manual of Military Surgery Prepared for the Use of the Confederate States Army (published 1863):

The first stage of anesthesia was one of excitement, producing "muttering, wild eyed, the cries, the exalted imagination" followed by "violent struggles, attempts to rise, and rigid contraction." If the spasm extended to the larynx, there would be danger of breathing being obstructed. Surgeons were instructed to remove the cone temporarily if this were the case. The second stage was that of unconsciousness, insensibility and relaxation of the voluntary muscles. Eyelids would no longer contract when touched. The pulse would slow and weaken, respiration became shallow and feeble (Civil War Amputations and Anesthesia).

From this, we see that anesthesia was very effective in helping soldiers to prepare for

surgery. The inhaler would eventually become an important part of that process.

Many surgeons believed there was no point in treating chest wounds because only eight percent of the people shot in the chest would survive. One specific side surgeon named Benjamin Howard discovered that many soldiers did not die because of the bullet, but because of the heavy breathing, which would cause the lungs to collapse. They soon found a solution that closed the wound with metal sutures, alternating layers of lint or linen bandages and a few drops of collodion. This allowed the wound to close. Thanks to Howard's genius idea, this invention became the standard treatment and a lifesaver during war.

Many soldiers were shot and injured. Many injuries were fatal because injuries jolted body parts out of place. When the bullet of the gun hit a soldier's face, it was nearly impossible to help the soldier. When a soldier was shot in the face, it was usually an instant death. If he did survive, a surgeon would have to be a miracle worker in order to help the soldier get his face back. The fatal wounds or injuries might cause the nose, for example, to move into the soldier's eye, causing deformity. Providing the soldier with facial reconstruction surgery was one treatment. This medical treatment was very dangerous and not recommended. It was a long, complicated, and painful process. However, these procedures proved to be successful. One account is as follows,

"Carleton Burgan of Maryland was in terrible shape. The 20-year-old private had survived pneumonia, but the mercury pills he took as a treatment led to gangrene, which quickly spread from his mouth to his eye and led to the removal of his right cheekbone. He was willing to try anything. In a pioneering series of operations in 1862, a surgeon from City Hospital in New York used dental and facial fixtures to fill in the missing bone until Burgan's face regained its shape" (5 Medical Innovations of the Civil War).

To conclude, we see how the Civil War helped the surgeons in the army have more knowledge and innovation in the area of medical research. The Civil War also helped medical research today by allowing doctors and surgeons to learn from their mistakes and about illnesses. Medics saw breakthroughs in the areas of facial reconstruction, amputation, and anesthesia. It was these medical advances, which had a very big impact on the American Civil War and on modern-day medicine.

Work Cited

- Bonnie, Dowart. "Modern Military Medicine." Civil War Museum. National Museum Of Civil War Medicine, n.d. Web. 17 July 2014 http://www.google.com/url?q=http%3A%2 F%2Fwww.civilwarmed.org%2Fnational-museum-of-civil-warmedicine%2Fexhibits%2F&sa=D&sntz=1&usg=AFQjCNEbVVCYgcsRccdmnO7IJQU9zV5Dw
- Dixon, Ina. "Civil War Medicine." *Civil War Trust*, n.d. 17 July 2014 http://www.google.com/url?q=http%3A%2F%2Fwww.civilwar.org%2Feducation%2Fhis tory%2Fcivil-war-medicine%2Fcivil-warmedicine.html&sa=D&sntz=1& usg=AFQjCNEdqoAHW8SXCXnrY 98IRQ2KnMOZw
- Shon, Emily. "How The Civil War Changed Modern Medicine" Discovery News. Discovery Communications, n.d. Web. 17 July 2014. http://www.google.com/url?q=http%3 A%2F%2Fnews.discovery.com%2Fhistory%2Fus-history%2Fcivil-war-modernmedicine-110331.htm&sa=D&sntz=1&usg=AFQjCNE-POKaisum-zb3ajfePkwFA9EPLg
- Tooker, John. "Aspect Of Medicine, Nursing And Civil War." *National Center Of Biotechnology Information*, n.d. 17 July 2014 http://www.google.com/url?q=http%3 www.ncbi.nlm.nih.gov%2Fpmc%2Farticles%2FPMC1863579%2F&sa=D&sntz=1&usg =AFQjCNG3GHxIRJdN0XN4SUsb3hyDdIur3g