

Medical Procedures and Non-Violent Deaths in the Civil War

The South was the region most affected where most of the battles during the Civil War were fought. The nation was a disaster after the war had ended and thought to be over. This war was most likely known as the war where a country turned against itself. Slavery, states' rights, economical problems and many other reasons led to the bloody war. The North had basically all of the nation's industry like factories, shops, etc. While the other side, the South, was more of an agriculture based economy. The South consisted of many slaves that made up more than half the total population in the whole south. Most of the North was against slavery which was a main reason of the Civil War taking place, in a majority of the people's opinion. Each side wanted to make changes for their liking expecting to be victorious but both sides also knew there could only be one side that takes the honor. Citizens agree that the real reason of war initiating was the election of President Abraham Lincoln. Both the North and South knew that with this election the North would have an upper edge politically in winning this war. Despite the fact of what seemed to be a simple disagreement, the war was and will always be one of the bloodiest in the history of the United States sacrificing an overwhelming number of about six hundred twenty thousand casualties were sacrificed to bring our nation to where it stands today ("Civil War Medicine," n.d.). Many questions are left unanswered like, "How would our U.S. look today if the South had won this war?" or "Would slavery still exist today?" and many more that will always remain open without answers because we have no proof to support a guess.

In current times it is believed the worst part of the war were the gory battles when in reality more lives were lost from sickness, infections, and many diseases that were present at

the time of the war. Although the total number of deaths from both sides combined was a total of six hundred and twenty thousand, surprisingly over four hundred thousand of these casualties weren't from the combat itself, but diseases and other medical issues that existed throughout the whole era of the Civil War. There are reasonably large amounts of explanations for all these deaths of brave soldiers that had nothing to do with the battles other than protecting their country for the correct objective. As we know, the technology that was available during the time of the war was not as advanced as we have today where we know basically every disease there is and in most cases, cures. During the Civil War era there was no understanding of infections and little done for the prevention of them. Prior to antiseptics and antibiotics, in many cases, minor wounds could easily be infected and many times fatal ("Civil War Medicine and the Battle of Cold Harbor," n.d.). There existed the superior risk of dying from disease than that of a bullet or any other incident in an actual act of battle. As explained before, more deaths were caused by fatal diseases than gunshots although some gunshots did lead to infections or diseases. Causes of these lethal diseases were poor hygiene in camps of the regiments, lack of sanitation facilities, cold, lack of shelter and proper clothing, shortage of food and water, and crowded camps. These were a deadly combination where diseases could effortlessly develop a disease.

Even if there was a diminutive understanding of these deadly diseases, a group called the Sanitary Commission formed to educate the Union army on proper sanitation techniques in an effort to try to prevent these deaths. Some men didn't mind the cautions of the Commission and continued on with the normal procedures of their days in the unsanitary camps. This group also attempted to change the procedures for injured men so they would be more sanitary and

advanced than what they were doing at the moment. One doctor soon began advising men in the army to stay away from fatty foods and eating at regular time of day. Men did not pay attention to the doctors' warnings and kept on with their diets and habits which consisted of heavy, fatty, salty meats, few vegetables, and irregular preparation and proportion of foods or dishes at many different times of day. An awfully large amount of men came from battles almost every day or other events with injuries of all kinds. The floods of wounded became overwhelming, and surgeons could only afford to spend a limited number of valuable minutes per soldier. The majority of soldiers, if not all, that had serious injuries in the torso would simply die from it. During the time of the Civil War, the infamous procedure of surgery known as amputation was basically the only one used on injuries on all sections of the body for bullet wounds. It was a very fast but a not very effective way to take the situation. Many times, this made the wound even worse than it was before and it became extremely infected. Many men believed it to be the easiest way to make the injury less bothersome although it was the most agonizing. To reduce this unbearable pain, chloroform was used. This liquid was applied to a cloth and detained over the nose of the patient until he was unconscious to reduce the torture and trauma of the amputation. At times there wasn't enough for every wounded man that needed help. The hospitals would run low on supplies since there was no way of getting them quickly. This would happen because a lot of chloroform was wasted until Dr. Julian John Chisholm invented an inhaler. This worked with the use of tubes that dripped with chloroform which worked as effectively and only used one eighth of what it did before.

In 1863, Stonewall Jackson's surgeon recommended the removal of his left arm, which had been badly damaged by

friendly fire. When a chloroform-soaked cloth was placed over his nose, the Confederate general, in great pain, muttered, "What an infinite blessing," before going limp. (Cellania, 2012)

Due to the vast number of wounded at a time, surgeons became used to the method and were more proficient at amputation. Many were able to perform a surgery in about 10 minutes. This was a great advantage for both sides since most regiments could only hold one or two medical professionals along with an occasional assistant. Since there were many amputations, some days surgeons ended with piles of limbs and other body parts up to 5 feet high ("Medicine in the Civil War," n.d.).

"In the operating tent, the amputation of a very bad looking leg was witnessed. The surgeons had been laboring since the battle to save the leg, but it was impossible. The patient, a delicate looking man, was put under the influence of chloroform, and the amputation was performed with great skill by a surgeon who appeared to be quite accustomed to the use of his instruments. After the arteries were tied, the amputator scraped the end and edge of the bone until they were quite smooth. While the scraping was going on, an attendant asked: 'How do you feel, Thompson?' 'Awful!' was the distinct and emphatic reply. This answer was returned, although the man was far more sensible of the effects of the chloroform than he was of the amputation." (Coco, 1995)

Although soldiers believed that amputation was for the better of their lives, it was very hazardous. They were right because amputation saved more lives than any other procedures by turning complicated injuries into smaller and simpler ones. Lack of water meant there was no hand washing for surgeons between procedures increasing the probability of infections. Ignoring these chances, a total of an estimated seventy five percent of amputees did recover. Even higher rank soldiers had to go through the same pain and surgeries as lower class men did. There was no kind of individual treatment for generals, corporals or other higher ranks. Amputation did cause a number of deaths creating infections or just unbearable pain, but it was not the only cause of disease and death of the men in both sides of the war ("Civil War Medicine and the Battle of Cold Harbor," n.d.).

Wounds and infections weren't the only ones causing the miserable lives of the men in regiment camps. Nature took part in taking lives ("Amputations in Military Surgery," n.d.). During practice drills and marches, men were exposed to the harsh weather during long cold winters or scorching summers. There was no excuse to not be in condition for battle. The bitter cold of the lengthy winters caused many soldiers to become sick. The tents they stayed in were located outside and were very thin increasing the chance of sickness among the large groups of people in regiments. In the Union Army, for every one man killed in combat, four hundred died of sickness and diseases. Many things created lethal diseases from materials that did not seem very deadly on their own like bacteria, for example. Bacteria can cause infection, disease, and sickness, all with the use of germs. Many things during the time of war carried germs. Dirt was a much unsuspected carrier along with mosquitoes in swamps. If a wound is not treated correctly or left untreated in general, bacteria and germs might enter which can lead to pus. This is a very

unpleasant looking substance that is created in a wound when white cells battle against the germs entering. Many times this could be treated with normal antiseptic. Dirt wasn't the only thing carrying around germs and disease. Some living organisms also contained signs of deadly diseases. Birds, livestock, and even small bugs like mosquitoes had the possibility of being contaminated. These fatal mosquitoes carried malaria. Malaria wasn't the only deadly disease transmitted through other objects. Known diseases during the time of raging war were measles, mumps, pneumonia, consumption, malaria, typhora, dysentery, diarrhea, yellow fever, scurvy, and venereal diseases (King, n.d.).

Without the right treatments or medicine, none of these deadly sicknesses could be cured and many times, even with medication, sick people could not be cured. These medications used at times did not contain the right amount of something or too much of something else and the doctor or surgeon would not know or be able to find out. Other times it just was not strong enough to fight against the diseases. Medicine during this occurrence was completely different than how we see it today. Things were unknown that could have possibly saved many lives during that time. Reports from doctors, surgeons, or any other type of assistant in hospitals showed many casualties due to the cause of not knowing how to treat a patient the correct way. Whiskey, barony, and strychnine, were used as stimulants for revues and circulatory system. For nutritional support, beef extract, coffee, condensed milk, black tea, ferrous, compounds, were used as cures for anemia. Medications seemed like normal soldier diets a number of times for different treatments. In the case of venereal disease, calomel was used for mouth as ointment and applied to sores or other options would be injections of silver nitrate, zinc, or chloride of potash, also known as potassium chloride. Patients with malaria

were treated with quinine alone with spirits of nitre and potassium iodine. For skin problems a simple scent was used and bromine as a soothing agent. Chloride was placed in wounds for cleansing or stimulants. Although men would scream in pain, it did show progress in the infection's rates now that they were lowering. Kidney problems were a major event in the war with all the bullet wounds in the torso area of men and also shots in the stomach. These were treated with spirits of ammonia, and potassium. Even if soldiers did not have a disease, surgeons and doctors did what they could to prevent them (King, n.d.).

When a soldier was brought in the camp with normal wounds, they were sealed with plasters with various agents like mustard or belladonna which was then spread on linen or regular paper to be applied to the skin on or around the wound. This came to show how effective it was to seal the wounds rather than to leave the injuries open with the high risk of infections leading to diseases much closely followed by death. This could happen very rapidly with the condition or the horrible camps where there was not one thing showing a sign of sanity. Swarms of flies could be seen harassing in every encampment and hospital. The flies were thought to be deadly or just unsanitary, but it was proved wrong. Flies would deposit their eggs in open wounds of the soldiers or other patients. Soon the eggs matured and maggots were born. These maggots did not cause pain but did in fact clean wounds of the soldiers by eating dead or infected skin. The surgeons soon started thinking that these maggots could have good benefits in preventing infections of wounds. Rats also worked in the same way maggots did by eating away the dead tissue left. Soon, many nurses and other people became disgusted in this method used although it was effective in most cases (Bollet, 2002).

Surgeons, doctors, nurses, and even assistants played a very large role in the Civil War.

These were the people that spent the time with all the men in need of help or dying. Many lives were saved with their knowledge, methods, and discoveries. People in the present say that was the era where many treatments and medications were discovered that can and are used even today. Soldiers were inspired by these life savers, as they were known for what they did. Some even took the opportunity when they could and became doctors or surgeons themselves. Union colonel, Thomas Reynolds, was seriously injured in battle, which led to amputation. Reynolds survived amputation and later became a professor of surgery and then commented on the practice of blaming surgeons for performing many unnecessary amputations which people believed caused more loss of lives than there should have been while others agree it was better to make an effort of saving lives (Bollet, 2001). Surgeons who agreed said that they saved lives and failure to perform necessary amputation created possibilities of fatal infection. There was really no other choice for the men in both sides of the army or the doctors themselves because amputation was the only surgery available.

In the North, over a total of thirty thousand amputations were done with an estimated same amount for the Confederates located in the South. Actual surgery was rare because infection was very often a case following after it. As a result, between 1836 and 1846, a total of thirty nine surgical procedures were performed at the Massachusetts General Hospital. In the first 10 years after the intro of anesthesia, 1847 through 1857, the annual average was about one hundred and eighty five, of which sixty percent were amputations. Even with technology and medicine progressing, surgery was still very infrequently used or preformed. Even if surgery was necessary, almost never was the abdomen or chest of a man opened during the procedure. "Many of our surgeons had never seen the inside of a living

subject," one physician wrote adding, "Many of the surgeons in the Civil War had never witnessed a major amputation when they joined the regiments and very few of them had treated gunshot wounds." (Bollet, 2006)

An average of two thousand four hundred twenty seven procedures was done annually at the hospital between 1894 and 1904, but by 1914 this increased to more than four thousand. Many Civil War surgeons that took part in medical procedures on men in the armies lived to see developments and advancements long after the war. These people saw and noticed the lack of preparation for treating large numbers of wounded men that they received after battles. Many more lives could have been saved considering the fact that there were more advancements in medical procedures soon after. About twenty five percent of patients were lost in total from not being able to recover after their surgery.

Despite the lack of preparation for medical procedures during the war, Union surgeons treated more than four hundred thousand wounded men of whom an estimated two hundred forty five thousand of them were wounded for gun shots or other artillery wounds. Surgeons described the scenes of them men pouring in as horrible where bones were sticking out, flesh was gone, or maybe the injury was internal and everything looked normal on the outside of the soldier. Operations were performed in at least four hundred thousand of all injured cases. As the war raged on, more surgeons began joining both sides of the armies in battle for jobs. At the start of the Civil War, the Union Army consisted of one hundred thirteen surgeons of which twenty four were dismissed and joined the Confederate Army. During the course of the war, formal and informal surgical training programs were developed for new surgeons joining either

side. These surgeons rapidly developed skills and knowledge that improved procedures. By the end of the war, more than twelve thousand surgeons had served the Union and about three thousand in the Confederacy.

Considering the two thirds of the whole death count that died of disease or sickness, fairly large amount still died from the battle shots fired from both sides. A variety of weapons were used during the war, which also included a variety of ammunition for each weapon serving a number of purposes. A popular ammunition type was the minie ball which was a round fired from rifles and were usually slow moving. Even small projectiles like that could produce a very large or deadly injury. When the body was struck at the bone the velocity of the projectile did not allow a clean exit leaving large wounds many times. Comminuted fractures were a very deadly type of injury. This type of injury occurs when the bone is either, broken, splintered or crushed into many pieces. Many times this would occur when a shot was fired and penetrated joints such as the knee, elbow, shoulder, wrist, ankle, and hip. But shots were also fired and hit in the face area leaving a change for life. Facial reconstruction also began during the Civil War. It began when a private was surviving pneumonia but it destroyed his face and doctors tried making it look normal using plastic surgery. The procedure did help but it did not look one hundred percent the same, nor was it possible to do so.

A total of over two thirds of the death count were from disease and sickness which is strange knowing the fact that the Civil War was one of the bloodiest wars in U.S. history. The lives of many brave soldiers that left homes, families, dreams, and many more things, were sacrificed in order to make the effort of setting the country straight. These men fought with honor with the thought in their head that they were doing it for the nation, their nation. They

fought bravely. Sadly, the majority of the men suffered from a long and painful wound leading to a death they didn't deserve. The war ended in 1865 and slavery was finally abolished but the price was high. Abraham Lincoln was assassinated days after by a man by the name of Booth, who was enraged. The Civil War was the most costly war in American History, and it has remained a valuable part of our history, so that we may remember always that we cannot afford to battle our brethren.

"Amputations in Military Surgery" Civil War Medical Books. N.p., n.d. Web. 2 Dec. 2012.

http://www.civilwarmedicalbooks.com/civil_war_amputation.html

Bollet, Alfred J. "Civil War Medicine Alfred J. Bollet, M.D." Civil War Medicine Alfred J.

Bollet, M.D. Galen Press, 2001. Web. 16 Dec. 2012. <www.galenpress.com/021.html>

Bollet, Alfred J. " Medical Book Extras Maggots and Rats: Nature's Surgeons During

the Civil War." Galen Press, 2002. Web. 16 Dec. 2012.

www.galenpress.com/extras/extras.31.htm

Bollet, Alfred J. "The Truth About Civil War Surgery." History Net Where History Comes Alive

World US History Online The Truth About Civil War Surgery Comments. Weider History Group, 12 June 2006. Web. 2 Dec. 2012. <<http://www.historynet.com/the-truth-about-civil-war-surgery-2.htm>>.

Cellania, Miss. "Neatorama." Neatorama. N.p., 20 Jan. 2012. Web. 14 Dec. 2012.

<www.neatorama.com/2012/01/20/five-medical-innovations-of-the-civil-war/>

"Civil War Medicine and the Battle of Cold Harbor." N.p., n.d. Web. 23 Nov. 2012.

<http://collectmedicalantiques.com/gallery/civil-war-medicine-and-the-battle-of-cold-harbor>>.

"Civil War Medicine." Civil War Medicine. N.p., 2003-2008. Web. 23 Nov. 2012.

<<http://www.sonofthesouth.net/leefoundation/civil-war-medicine.htm>>.

Coco, Gregory A. A Strange and Blighted Land: Gettysburg : The Aftermath of a Battle.

Gettysburg, PA: Thomas Publications, 1995. Print.

King, Janet. "Vermont Civil War." Vermont Civil War. N.p., n.d. Web. 27 Nov. 2012.

<<http://www.vermontcivilwar.org/medic/medicine2.php>>.

"Medicine in the Civil War." American Civil War Medical and Surgical History. N.p., n.d. Web. 23

Dec. 2012. <http://americancivilwar.com/kids_zone/civil_war_medicine.html/>.