

Name _____

Date _____

Surgeons and Butchers

The views held by 18th century physicians are very different from those held by medical practitioners of today. Physicians in the 18th century had no knowledge of bacteria, germs, or viruses, nor of the fact that disease was spread by them. Therefore, they did not practice sterilization, or personal or hospital hygiene...

...Medical practitioners of the colonial period in America most commonly held the theories of Hermann Boerhaave (1668-1738). Boerhaave's studies produced the medical theory that disease was an imbalance of natural activities. He believed fever was the body's attempt to keep from dying and that digestion and circulation could be explained by mechanical ideas. Boerhaave recognized three conditions in the body that led to disease: salty, putrid, and oily. His remedy was to sweeten the acid, purify the stomach, and rid impurities through bleeding and purging. These practices were widely used by doctors in colonial America...

...There were approximately 3,500 practicing physicians in the colonies in 1775. Some were trained at the first medical college to be opened in America, the Pennsylvania Hospital, which opened in Philadelphia in 1768. It was followed by Kings College which opened two years later in New York. Because these colleges accepted only a handful of doctors for training, most American doctors were trained through apprenticeships, receiving seven years of training before they were officially considered physicians.

While these doctors were highly trained by the standards of their time, their services were not available to all of the general population. Many people lived too far away from any doctors to use their services... Women became responsible for family health care in addition to their responsibilities for housekeeping and childcare. They served as doctor, nurse, and pharmacist despite the fact that they rarely received any type of formal education...

...During the Revolutionary War, anyone with medical knowledge was pressed into service to help tend to the sick. Each regiment brought its own physician, but these hometown doctors varied in ability. Less than 300 had a medical degree. Only a handful had graduated from the ten-year-old Philadelphia Medical College. The remainder were mainly graduates of European medical schools. Admission requirements included a knowledge of the classics and a hefty bank roll [account]. When the student was finished, he had been exposed to plenty of theories but never to a living, breathing patient.

Despite this varied training, Revolutionary War surgeons did a notable job of attempting to save lives. Most were competent, honest, and well-intentioned, but conditions and shortages in medical supplies placed an overwhelming burden on them. Besides caring for those wounded in battle, the camp surgeon was responsible for caring for the camp's diseased soldiers. The camp surgeon was constant alert for unsanitary conditions in camp that might lead to disease. He spent a good deal of time aiding patients rid their bodies of one or more of the four humors. Common diseases suffered by soldiers were dysentery, fever, and smallpox. Most illnesses were caused by unsanitary conditions in camp.

Most wounds were caused by musket balls or the bayonet. In cases where the bone was damaged so severely that a limb could not be saved, the surgeon performed an amputation without the type of anesthesia or sterilization we know today. In proceeding with an amputation, officers received rum and brandy when it was available, but for enlisted men a wood stick to bite down on had to suffice. Two surgeon's mates would hold the patient down on the procedure table. A leather tourniquet was placed four fingers above the line where the limb was to be removed. Then the surgeon used his amputation knife to cut down to the bone of the damaged limb. Arteries were moved aside by tacking them away from the main area with crooked needles. A leather retractor was placed on the bone, and pulled back to allow the surgeon a clear field of operation. Then the surgeon chose his bone saw, a small one to remove arms and a large upper femur saw to remove a leg above the knee. A competent surgeon could saw through the bone in less than 45 seconds. Arteries were buried in tissue skin flapped over and sutured. Bandages with pure white linen cloth and a wool cap were placed on the stump. The patient, who had more than likely gone into shock and had a much lower than normal temperature, was stabilized when possible. Only 35% of the persons who went through this procedure survived.

Great advances were made in surgery during the Revolutionary War. In times of peace, doctors had few opportunities of perfecting their trade. During the war, however, excessive exposure to injury and disease was necessary to progress in the field of medicine where knowledge would be acquired only by practice and observation. The injuries that occurred in battles gave physicians an opportunity of witnessing more in one day than they could have acquired in years of a peace time medical practice. It was such experience, gained on battlefields, that helped give new direction to the medical profession of a new nation. — Elizabeth Rorke

Brandywine Battlefield Historic Site

<http://www.ushistory.org/brandywine/special/art06.htm> (accessed December 9, 2008)

Answer the following questions in your Notebook.

1. What were the common remedies used by doctors in colonial times?
2. How were doctors trained in colonial times?
3. What was the cause of most illnesses in the military camps during the Revolutionary War?
4. Why do times of war tend to promote the advances in medical knowledge and practices?