On September 9, 1943, Adeline Simonson and fellow nurses of the 95th Evacuation Hospital (95th Evac) boarded Her Majesty’s Hospital Ship (HMHS) Newfoundland for a short run from Bizerte, Tunisia to the Gulf of Salerno, the site of the first Allied invasion of mainland Italy. While waiting 30 miles offshore, a German shell struck the vessel. As the fire spread, chaos erupted. Simonson grabbed her glasses and bible and reported to the evacuation boat station. A British nurse was trapped in a burning cabin with her head stuck out the porthole, howling in sheer terror. Knowing that she might not survive, a passing soldier knocked her unconscious. For the rest of her life, Simonson would be haunted by the woman’s desperate screams.1

The bombing of the Newfoundland, though undoubtedly traumatic, was one of many similar incidents Simonson and other combat nurses experienced in WWII. Until recently, their vital contribution to the war effort has attracted little scholarly or popular interest. Neither the Veteran’s Administration nor historical societies kept any records, and the nurses rarely spoke about their service. A handful of recent studies has finally begun to shed light on the history of the ANC, yet their discussion of nurse anesthetists is surprisingly scant. This article aims to fill a gap in our knowledge by throwing light on the ordeal of one nurse anesthetist attached to the 95th Evacuation Hospital. Drawing on unpublished correspondence and diaries, we recreate the story of Adeline Simonson and examine its lessons for combat nursing. The frontline setting fostered an unprecedented level of collaboration between nurse anesthetists and physician anesthetists. Under the guidance of Captain Marshall Bauer, the 95th Evac’s sole anesthesiologist, Simonson not only acquired new techniques such as the administration of spinal anesthesia, but also helped train other nurses. Most important, while under fire the medical officers learned to overcome varying levels of ability and experience and to work together as a unit.

**Keywords:** 95th Evacuation Hospital, Adeline Simonson, Anzio, Army Nurse Corps, Captain Marshall Bauer, WWII.
Care: A History of American Nurse Anesthetists, while providing a useful update to Thacher’s foundational History of Anesthesia, with Emphasis on the Nurse Specialist, spends little time on the nurses’ actual war experience. Much work remains to be done to recover their stories. Drawing on unpublished correspondence and diaries, this article aims to fill a gap in our knowledge by throwing light on the trials of WWII nurse anesthetists and to bring the experience of one of these intrepid women to life.

At the time of the Japanese attack on Pearl Harbor in early December 1941, the Army Medical Corps was woefully unprepared for four years of combat. WWI had taught the Americans the inadequacy of the existing organizational structure for the treatment of war casualties. The interwar period witnessed progress in the establishment of educational standards for nurse and physician anesthetists and the development of the mobile hospital. A significant milestone in wartime nursing, mobile hospitals relied on intensive resources which were not always available. A massive shortage of trained personnel was a particular problem. In 1941, the ANC listed fewer than 1,000 nurses on its rolls. By war’s end, the nurses’ number had risen to roughly 59,000. Of these, more than 2,000 were trained to administer anesthesia. In keeping with the vision of Miriam Shupp, the fourth president of the newly organized American Association of Nurse Anesthetists (AANA), they embraced the advice of Ralph Waldo Emerson to “work and learn.”

There was little in Simonson’s modest upbringing that prepared her for the rigors of combat nursing. The daughter of Betty Iverson, a Swedish immigrant, and Simon Simonson, a WWI veteran of Swedish descent, Simonson was born in 1920 in Brainerd, Minnesota. Although she would remember her childhood as happy, it was far from easy. At the age of four, she witnessed her two-year old sister, Arlene, succumb to diphtheria, an event that may have awakened her interest in nursing. Three years later, Simonson’s mother developed polio, which left her partially disabled. As a result of her mother’s incapacitation, young Adeline was charged with taking care of her infant sister, Mardell. At the very least, these experiences prepared her for a life of dedicated care. After graduating from high school, she entered a hospital-directed nursing program at St. Luke’s Hospital Training School in Duluth. At the time, nursing was one of the few affordable professions available to women. As a student nurse, Simonson had the opportunity to perform tracheal intubation, use open-drop ether, administer thiopental, and use the Heidbrink machine under the supervision of the head anesthesia nurse. Although her training was not up to the standards of the AANA, she was employed by St. Luke’s and administered ether anesthesia for general OR surgical cases.

War
When the American Red Cross called for volunteers, Simonson jumped on the opportunity, apparently inspired both by a sense of duty and adventure (Figure 1). Along with several fellow nurses, she “just decided, heck, let’s do this,” her sister remembered. On March 6, 1943, Simonson arrived at Camp Breckinridge, Kentucky for military training. She was assigned to the 95th Evac, one of the 63 evacuation hospitals that complemented the 34 field hospitals, 47 station hospitals, and 146 general hospitals serving the approximately three million American soldiers in the European theater of war. (Figures 2 and 3) Evacuation hospitals operated behind the frontlines and had to move frequently. Their mission was to save lives rather than to reconstruct or rehabilitate. For 15 months Simonson would help treat patients who took part in three major Allied invasions: Operation Torch (North Africa, November 8, 1942); Operation Avalanche (Salerno, September 9, 1943); and Operation Shingle (Anzio/Nettuno, January 22, 1944). Needless to say, she could not have anticipated the extent of the hardships that awaited her overseas when, on April 15, 1943, she boarded the U.S. Army Transport Mariposa to sail for Europe.

Upon arrival in Morocco, the
nurses of the 95th Evac discovered that they would be treating soldiers wounded in the aftermath of Operation Torch. German Field Marshal Rommel’s Afrika Korps had recently surrendered, and after nearly five months of intense fighting, the war’s North African Campaign was winding down. The 95th Evac set up their first hospital in an abandoned wheat field near Oujda, a town close to the Algerian border. Getting things ready was “quite a job,” Simonson reported home in a letter dated May 23, 1943. Working in tents and wearing seersucker dresses with “Curity diaper head turbans” was quite a transition from the spic and span uniforms they had worn back home.12 The hospital was totally self-supporting with its own trucks, generators, laundry facilities, and supplies. A surgical team comprised a surgeon, surgical assistant, anesthetist, and a ward officer who was responsible for preoperative tracking of patients. The nurses were housed in pyramidal tents located near an olive grove. The only source of water was a water truck, and personal laundry was often cleaned in helmets. Extreme weather conditions meant scorching heat in the day and freezing cold at night, requiring nurses to wear long underwear, coveralls, wool socks, sweaters, and wool caps.6

Although the 95th Evac stayed in Oujda for a mere six weeks, the medical staff was able to gain valuable experience in the running of an evacuation hospital. This experience would stand them in good stead at their next stop. On July 8, they departed for Ain El Turck near the Algerian city of Oran. It took them only six hours to set up the hospital. Casualties from Operation Husky, the Allied invasion of Sicily which was launched the day of their arrival, began to pour in. Many of the casualties required surgery. Despite the increasing severity of the cases she treated, Simonson’s real baptism of fire would not come until her relocation to Italy, where she would be among the first American nurses to participate in the Allied conquest of the Italian mainland.

Despite heavy losses, the Sicilian campaign was a success. Within six weeks, the American and British forces led by generals Patton and Montgomery, respectively, moved into Messina, poised to cross the Strait. Instead of invading Calabria, however, it was decided to land at Salerno. Mussolini had been deposed on July 25, 1943, and the Allies expected little resistance in their march up the peninsula. In the event, what Churchill had described as “the soft underbelly of the Axis” revealed itself to be a “tough old gut,” as US General Mark Clark caustically put it.13 Despite the Wehrmacht’s deteriorating situation in the Soviet Union, Hitler decided to triple German forces in Italy, from six to eighteen divisions.14 The result was some of the bloodiest fighting in southern Europe.

The 95th Evac had been designated as a combat-support hospital for the Allied landing at Salerno, slated for September 9. For safety reasons, the nurses were to follow three days later. As we have seen, the plan backfired, and the ship that was to transport them to Salerno was hit, and sunk. To recover from their injuries, the nurses returned to Bizerte. On September 22, they finally arrived at Paestum. The hospital had been set up only 15 miles from the combat area, and the nurses were put to work immediately. The large number of casualties soon stretched the limits of the hospital’s capacity. Statistics paint a stark picture. In Oujda and Ain El Turck, a total of 2,832 patients had been admitted over 77 days. In Paestum alone the medical staff treated 2,443 patients within the space of a mere 11 days. Admission figures would rise to 3,616 for Naples (36 days), 3,852 for Capua (55 days), and 2,152 in Anzio/Netunno (19 days).15 These figures reflect the evolution of the frontline as well as the intensity of the fighting.

As in North Africa, the 95th Evac was constantly on the move, adding even more pressure onto the already
exhausted nurses who frequently had to put in 12-hour shifts and could hardly get any sleep because of the relentless bombing. “Our operating room has been going steady night and day for the past 4-5 days,” Simonson wrote from Capua on December 5. “I have never worked so hard in my life. We have 2 teams—one working days and the other nights.” To alleviate the workload, two additional surgical teams and an extra shock team were temporarily assigned to the 95th Evac. Relentless rain added to the misery, as nurses had to work in galoshes.3 Yet, worse was to come.

Since the Allies were unable to push past the Germans defending Mount Cassino, American and British troops were to land at Anzio, a beach resort 33 miles south of Rome, and then beat a quick path to Rome. The end-run, amphibious invasion of Anzio came to be known as Operation Shingle.16 According to naval historian Samuel Eliot Morison, the operation was unique in the naval history of the war: “It was the only amphibious operation in that theater where the Army was unable promptly to exploit a successful landing, or where the enemy contained Allied forces on a beachhead for a prolonged period.”16 While the Allies waited for more reinforcements to arrive, one of the most grueling battles of the war unfurled.

On January 23, 1944, the 95th Evac set up a hospital in Nettuno, a sleepy town south of Anzio. For the next 19 days, the staff experienced continuous air raids and heavy artillery bombardment. “All night long we’d hear this rumbling and roaring of big guns,” Simonson remembered. “We’d never heard anything like that before.”5 Echoing her statement, another medical officer wrote dramatically: “At Anzio, life is one continuous bit of hell. Innumerable air raids, bombardments, rockets whizzing by at dark, ships blowing up, ammo exploding all around us, bombs falling everywhere.”17 To prevent calamity, the nurses carried their helmets at all times and slept in their fatigues. During their second night at Nettuno, an air raid forced them to seek shelter in ice cold foxholes, their clothes damp and muddy, and their bodies shaking and breathless with fear.

February 7 turned out to be “the blackest day in the history of the 95th Evac.”17 According to the diary of Arthur B. deGrandpré, a surgeon with the 95th Evac. On that day, the hospital suffered a direct hit by German antipersonnel bombs. The attack killed 22 staff members including three nurses; the OR was in shambles. “We are all very depressed because of what happened yesterday, but I guess we have to make the best of it,” Simonson wrote a day after the bombing. She added stoically, “Do not worry about me if you read anything. Another pilot I knew was killed the other day.” It is doubtful whether this well-meant advice had the desired effect. For nurses like Simonson, death had become a common occurrence. In a letter written only two days later, Simonson described another bombing raid that hit the hospital and, she sarcastically quipped, “Put the finishing touches on a unit that was already operating at (a) severe handicap.”5 Twenty-nine ward tents, two surgical tents, all X-ray equipment, headquarters, and eight additional tents had been destroyed. Due to the loss of personnel, the hospital could no longer function.

To the men and women of the 95th Evac, survival itself must have appeared to be miraculous. By the time the Allies finally succeeded in breaking out of the Anzio beachhead on May 23, the 95th Evac had long moved on. After the destruction of their hospital, they had joined the 15th Evacuation Hospital near Riardo. This was followed by a quick succession of short stints in Carinola, Itri, and Cori (March 16 to June 10). On June 13, Simonson and her fellow nurses arrived in Montalto, 70 miles north of Rome, where they helped set up their tenth hospital and finally obtained some much-needed rest and recreation.

After Montalto, the 95th Evac would no longer be assigned to frontline units. Designated to take part in Operation Dragoon, the invasion of southern France, the nurses joined the 11th hospital at Sparnise, the staging area for the invasion. For Simonson, participation in the French campaign would be short-lived. On August 6, 1944, exactly two months after the invasion of Normandy, she married Marvin Williams, a member of the Thirty-fourth Infantry Division. She had met the captain at a dance during her North African stint and fallen in love with him. The wedding seems to have been a highlight for the staff of the 95th Evac, and made it into a handful of reminiscences published after the war. “It will be our first wedding,” Dr deGrandpré, fondly jotted in his diary. (Figure 4) Nothing better demonstrates the unit’s close-knit community than his use of “our wedding...” The reception at the Orange Club in Naples was one of the last times Simonson was among her fellow nurses. Soon after the wedding, she...
discovered that she was pregnant, which put an end to her service. Her premature departure for home must have been a bittersweet experience. Marriage, children, and the onset of severe rheumatoid arthritis at age 35 gradually limited her opportunity to administer anesthesia, yet she never abandoned her keen interest in anesthesia and was always proud of her achievements, according to her daughter.

**Work**

In *Hospital at War*, a history of the 95th Evacuation Hospital, surgeon Zachary Friedenberg describes Simonson as “our super competent anesthetist.” Could there be a greater compliment for the young Minnesotan nurse who had entered the army as a nonregistered nurse anesthetist? Despite her limited training, she was strongly invested in anesthesia. While at Camp Breckenridge, she discovered that she would be assigned to administer anesthesia under the direction of Captain Marshall Bauer. (Figure 5) The son of Russian-Jewish immigrants, Captain Bauer had enlisted on September 1, 1942 and would serve for more than four years. Described as a brilliant diagnostician, he soon learned to depend upon and respect this young nurse with little experience, but great dedication. As the sole physician anesthetist of the 95th Evac, Bauer was in charge of organizing an anesthesia group capable of administering safe anesthesia under critical and unknown war conditions. The Subcommittee on Anesthesia of the National Research Council recommended that medical officers and corpsmen be utilized in war time to administer anesthesia, but Captain Bauer soon recognized the inadequacy of this arrangement. Nurses, it turned out, were better suited for this duty because they volunteered, were very interested, and seemed adept in the art of administering anesthesia. As far as Simonson was concerned, her professional relationship with Captain Bauer turned out to be fortuitous. Not only did he teach her new techniques, but they also worked together to help train other nurses to administer anesthesia. This effort resulted in an increase of nurse anesthetists from three to eight.

Treating patients in World War II was far from easy. The injuries the soldiers sustained in action ranged from the fairly simple, such as fractured ankles during parachute jumps, to the complex, including neurosurgery and thoracic surgery. Simonson’s first patients were paratroopers from the 509th Parachute Infantry Regiment and the 82nd Airborne Division in Oujda. During an exhibition for the top brass, Simonson watched in horror as the wind shifted and more than 50 chutes plunged to the ground. “One by one the troopers hit the ground, breaking ankles, feet and arms,” her fellow nurse Claudine Glidewell remembered. “And one by one Si (Simonson’s nickname) and I put them to sleep to have their injuries repaired. We’d ask them to count as we gave them Pentothal and most of them never got beyond four.” On that first day alone, the 95th Evac admitted 109 patients.

If treating fractures was comparatively simple, patients needing complex surgery taxed the energy and ingenuity of the medical staff. Neurosurgical cases, which in Italy were handled by the surgeons of the 95th Evac, had a very high incidence of postoperative complications and required laborious nursing care. Thoracic surgery was similarly labor-intensive. Due to the large number of penetrating wounds of the chest, the surgical team developed considerable experience and expertise in caring for these patients. Intercostal nerve blocks, physical therapy, and oxygen treatment helped reduce complications. Some injuries were so severe that no treatment availed. Simonson vividly remembered administering anesthesia to a young Italian girl who had hidden in the hay during a bombing raid. During explorative surgery of her abdomen, Simonson was shocked to see the girl’s body filled with hay. Tragically, the child succumbed to her injuries, and Simonson was haunted by her loss for years.

During the Italian campaign, many soldiers suffered life-threatening injuries. Under conditions of war, treatment became exceedingly difficult as the following episode demonstrates. On February 7, 1944 Simonson was in the OR during an air raid. She had just begun administering thiopental when a bomb struck. Shoved under the table by a surgeon, she kept one hand on the IV and the syringe. After the bomb, she made sure the IV was still working and continued administering anesthesia as the surgeon completed the procedure. When she came out of surgery, she saw white nurse’s shoes sticking out under blankets and realized that the casualties included their chief nurse, Blanche Sigman and her assistant Carrie Sheetz. It is difficult to imagine the feeling of despair and horror that must have gripped her at the sight of her dead comrades.

Injuries caused by shell fragments were also typical. After the bombing that destroyed the 95th Evacuation hospital in Anzio/Nettuno,
Simonson’s first patient was a sergeant struck in the neck by a bomb fragment. Covered with blood, he was put on the OR table and cried out, “Doc, please save me!” As soon as Simonson had administered anesthesia, the surgeon set to work. Though this particular patient would survive, others were less fortunate.

“There was a long line of wounded hospital personnel and rewounded patients,” Simonson observed later. “We couldn’t save them all.” The number of wounded was so high, in fact, that not everyone could be anesthetized, as a surgeon with the 95th Evac remembered. This observation once again shows that despite the increase in trained nurse anesthetists, personnel shortages continued to plague the ANC throughout the war.

Although not everyone could be treated appropriately, let alone saved, progress in anesthesia undoubtedly made operations easier for the patients. By WWII, more anesthetic agents had become available including ethylene, ethyl chloride, and thiopental sodium. Ether emerged as the anesthetic of choice for surgeries of seriously wounded men and was best tolerated by men in shock. Local anesthesia alone proved to be inadequate for badly wounded men who were apprehensive and in great pain. Thiopental, having gone through first valid trials during the fighting in North Africa, proved to be well-suited for wartime surgery. It was regarded as an optimal anesthetic for shorter procedures lasting 30 minutes to 45 minutes, and tended to be most useful as an induction agent for an ether anesthetic in men assessed to be in good condition.

Statistics compiled by Captain Bauer indicate that intravenous anesthesia was by far the most common technique employed, with inhalation anesthesia a distant second. Simonson initially used a small Heidbrink gas machine with nitrous oxide and an attachment for ether. Captain Bauer, who preferred local block infiltrations and spinal anesthesia whenever feasible, taught Simonson to become proficient in the administration of spinal anesthesia. She was grateful for the opportunity to learn the technique and found it very useful, especially in cases involving lower extremities. Without a doubt, her wartime service allowed her to become more proficient and confident in her work.

**Conclusion**

According to Marianne Bankert, the war gave the field of anesthesia a “great impetus.” At the same time, the struggle between anesthesiologists and nurse anesthetists that had plagued the profession in the 1930s was by no means over. It may be argued, in fact, that this struggle was in large part responsible for the denial of nurse anesthetist histories like the one recounted in this article. When Adeline Simonson joined up in 1943, nurse anesthetists were not even listed in the military’s Table of Organization. To be sure, her work was highly valued on the front. Once she returned to the United States, however, she met with little appreciation or understanding. No one seemed to be interested in her ordeal. This lack of empathy undoubtedly contributed to the silencing of voices such as hers. Luckily, the situation has finally begun to change. This is important because the story of Simonson’s WWII experience offers important insight into combat nursing.

To begin with, the provision of medical care during wartime was vastly different from the management of medical care in civilian life. Performing surgery under fire, for example, challenged the medical officers to learn to overcome varying levels of ability and experience and to work together as a unit. It also fostered collaborations that would have been unthinkable in a civilian setting. As the 95th Evac’s sole anesthesiologist, Captain. Bauer was faced with the responsibility of ensuring that an adequate number of nurse anesthetists would be available to handle the provision of anesthesia for an unknown number of war casualties. Just as the more experienced surgeons trained less experienced surgeons, Captain Bauer taught nurses like Simonson, who in turn helped teach other nurses. The result of these collaborations speaks for itself. Despite horrific war casualties, the 95th Evac performed as a highly efficient organization that boasted a survival rate of 99%. Remarkably, complications due to anesthesia were minimal. The number of six deaths out of 41,663 admissions reveals the efficiency of the new techniques employed. Simonson never mentioned losing a patient due to an anesthetic mishap.

Although more research will be needed to establish the representative nature of Simonson’s experience, the available evidence suggests that it was fairly typical. Colonel Mildred Irene Clark, a nurse anesthetist who served in Hawaii during WWII, similarly endured the stressful conditions of treating casualties under fire and, like Simonson, helped train nurse anesthetists for deployment. Depending on the theater of war and the physical conditions of duty, experiences obviously varied. At the same time, the war’s impact on the profession is beyond dispute. As the education consultant for the ANC noted in 1947, “World War II conclusively demonstrated the need for nurses trained in anesthesia, both for battle-front duty and for service in Army hospitals caring for military personnel.”

Although public recognition for the nurses’ service was late in coming, Simonson could take comfort in the fact that the members of her unit had been commended for “[t]he courage, efficiency, and unselfish devotion to duty” and “[t]he courage under fire and devotion to
duty" they had demonstrated during the Salerno and the Anzio/Nettuno landings. In 1989, more than 40 years after the end of the war, the vital contributions of women veterans were finally recognized with the First National Salute, a three-day event honoring their contribution to the war effort that was covered by the major national television networks. Considering her fearless dedication, it seems entirely fitting that when Adeline Williams died in 2002, she was buried at Arlington National Cemetery. (Figure 6)

REFERENCES


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