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THE LIFE AND TRIAL OF DAGMAR NELSON – PART 1

During the more desperate years of the Great Depression, a group of physicians brought an injunction proceeding against Dagmar Nelson and her employing hospital for illegally practicing medicine without a license. She administered general anesthesia and her employer knew it and supported her. It was a bizarre trial in that the arguments presented by both sides seem incongruous to our way of thinking today. The evidence presented at the trial echoed the predominant view at the time—the undisputed dominance of the male physician over the female nurse, who was portrayed, even by the

defense, as only an extension of the surgeon who “has the power and therefore the responsibility” to control the surgery. Had she lost, anesthesia as a specialty of nursing would not exist. The method by which she won, however, has haunted us to this day. Part 2 of this 2-part column on “The life and trial of Dagmar Nelson” is scheduled for publication in the August 2006 AANA Journal.

Key words: Court decision, Dagmar Nelson, legality of nurse anesthesia practice, supervision, Verne Hunt.

Early life and nursing training

Dagmar Alexandra Nelson (Figure 1) was born in her home on Good Friday, April 15, 1892.¹ Both of her parents were born in Denmark and settled in St Paul, Minn. She was the fifth child of 8 children and the oldest girl. Her father was a grocery clerk. Her oldest brother was the first to leave the household and go out on his own. He moved to Montana and became a farmer, but the business failed and he returned to St Paul (Dan Nelson, Dagmar Nelson's nephew, oral communication, August 2004). Nelson was the only other sibling to leave St Paul, and she never returned.

Nelson chose to become a nurse, and although there was a nursing school in St Paul, she went to Rochester, Minn, and enrolled in St Mary's Hospital

Nurses Training.^{2,3} The hospital, not yet called “The Mayo Clinic” was establishing a reputation as a leading hospital, not only in that part of the country, but nationwide, particularly in the surgical specialties.⁴

When Nelson was born, the germ theory was still being debated, but while the arguments were in progress, Joseph Lister's concepts of asepsis were taking hold. When she started nursing school, steam sterilizers were coming into use, rubber gloves were covering some bare hands,⁵ and surgery was moving from a procedure of loathing and desperation to one that patients began to choose somewhat “electively.”

Nelson finished her nurses training in 1912, 2 months before the Titanic began its fateful cruise. Her training program was 2 years in length.³ As was the cus-

Figure 1. Nurse anesthetist Dagmar Nelson, circa 1926



(Courtesy of Olmstead County Historical Society.)

tom of the time, Nelson did not stay hospital based after graduation. She was closely involved in the care of a patient at St Mary's who had been convalescing for a

long time. When he was discharged he returned to his home in Seattle, and upon her graduation, Nelson went to Seattle as his private duty nurse. She remained in Seattle, for a year and then went back to the now Mayo Clinic, being perhaps the first St Mary's graduate to become a Mayo Clinic nurse.

Move to New York

In 1923, she went to New York, NY, where she took a job as a medical-surgical nurse at the Presbyterian Hospital.³ She said that she went there for "post-graduate" work, to enhance her skills. Why she went so far away to do that is unknown; however, she was professionally reared in an environment that encouraged travel to enhance one's professional growth. St Mary's Hospital and the Mayo Clinic were known for attracting nursing students and physicians from all over the world, and the Mayo brothers likewise traveled to acquire new skills and ideas. William J. Mayo frequently took nurse anesthetist Florence Henderson with him on his trips so she could acquire more anesthesia knowledge, as well as share her experience with other anesthetists (Mary E. Shirk Marienau, nurse anesthesia program director, Mayo Clinic, oral communication, April 2005).

New York also may have attracted her because of the culture of the arts. Her surviving family reported that she was an avid reader who enjoyed the theatre and opera (Dan Nelson, oral communication, August 2004). She also was an accomplished singer and was recruited to sing a vocal at the 1910 commencement exercises of St Mary's Training School for Nurses.⁶

She was in New York in the

midst of the Prohibition, and although her nephew said that she would only have an occasional glass of wine, she was undoubtedly introduced to "speak easies," at least in name, if not in fact. These were covert saloons and illegal drinking establishments that were there by the thousands.⁷ But coming from Minnesota, the state that originated the Volstead Act (which enforced the Eighteenth Amendment, or Prohibition) she probably did not like the lifestyle of New York and returned to the Mayo Clinic.⁸

Anesthesia training

Shortly after her return she began a 6-month anesthesia training program under the supervision and mentorship of Mary Hines (Figure 2), Mayo Clinic nurse anesthetist (Mary E. Shirk Marienau, nurse anesthesia program director, Mayo Clinic, oral communication, April 2005). While Nelson was in nurses training, her earliest role models in this specialty who probably sparked her original interest, were none other than Alice Magaw and Florence Henderson (Figure 3). Being a small hospital in which everyone knew everyone else, she may have had many conversations with Edith Graham (Mayo), who learned anesthesia from her future father-in-law, William Worrall Mayo.⁹ Florence Henderson would renew her friendship with Nelson years later in Los Angeles, Calif.¹⁰

In describing her training, she said that she stood in the operating room next to a nurse anesthetist for several weeks before she was even allowed to hold a patient's chin to support his airway. The training was intensive in watching the patients' breathing patterns, maintaining airways, and keeping the patients at the proper level of anesthesia. The

Figure 2. Nurse anesthetist Mary Hines, undated photo



(Courtesy of AANA Archives.)

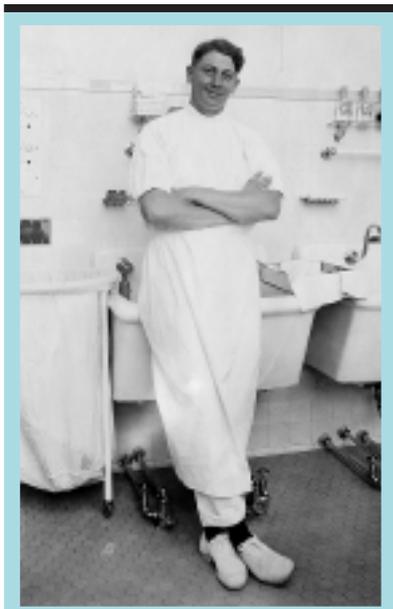
Figure 3. Nurse anesthetist Florence Henderson, undated photo.



(Courtesy of AANA Archives.)

agents she learned to use were ether, chloroform, nitrous oxide, and ethyl chloride as well as oxygen. In those days carbon dioxide also was given to stimulate respiration. She learned how to give ether by open drop as well as by mask with oxygen and nitrous oxide. The anesthesia apparatus was not called an "anesthesia machine" yet. It was common to administer nitrous oxide for induction, and when more relaxation was required ether was

Figure 4. Verne Hunt, MD, circa 1926



(Reprinted with permission from Mayo Historical Unit, Mayo Clinic, Rochester, Minn.)

added. Nelson did not use chloroform very much, and she was not taught regional anesthesia.¹⁰

The saying, “Keep your finger on the pulse” had its origin in this era. Routine monitors were the eyes, ears, and hands of the anesthetist – only. Although some nurses took blood pressure readings, it was a skill practiced mostly by physicians and then only in diagnostic situations. The blood pressure cuff was not a routine anesthesia monitor at this time. The anesthetist, nurse or physician, observed the respirations closely for depth, rate and quality—feeling the pulse for rate, rhythm and “strength.” Intravenous fluids were not routinely used, and, of course, electrocardiograms were some 40 years into the future.

Verne Hunt

While at Mayo she met a surgeon, 4 years her senior, named Verne C. Hunt (Figure 4) who would be very influential in her life a few years later. After years at Mayo,

Hunt returned to Los Angeles, Calif, where he had spent a year of internship. There he joined the staff of several hospitals but spent most of his time operating at St Vincent’s Hospital.¹⁰ The stock market had crashed, the economy was going down, and everyone’s income was falling. Those who had the most lost the most. Physicians with high incomes saw that diminish. There was no health insurance as we now know it. That was a concept that was on some people’s minds, but had not materialized. Most patients paid by cash for their healthcare. If they didn’t have money, they postponed surgery and then only had the surgery in desperation.

There were very few physicians who practiced anesthesia as a full-time service. Most who did administer anesthesia were surgeons as well, and all surgeons were family practice physicians (general practitioners or GPs) and they relied on general practice as their mainstay income.¹¹ The competition at the time was to draw entire families into the practice and then operate on anyone who needed it. Some surgeons rewarded GPs for the surgical referral by asking the GP if they wished to administer the anesthetic. This was a mechanism of keeping that physician active in the care of his patient and to help that physician supplement his flagging income during hard times.¹¹

Nurse anesthetists in Los Angeles County were employed by hospitals, and some hospitals used nurse anesthetists exclusively. In other cases, as frequently happened, if physician anesthetists were available, nurses were assigned or asked to give anesthesia only to patients who could not afford to pay a physician anesthetist’s bill.¹⁰ At least 1 nurse anesthetist at that time

billed patients herself and did not accept hospital employment. She was most unusual. Her name was Sophie Gran Jevné (Winton).⁹

Verne Hunt had a stormy time at St Vincent’s. He was known to have a temper in the operating room. When the scrub nurse handed him the wrong instrument, he would throw it, not just across the room, but out the window. Adding more drama to this behavior, the operating room was on the seventh floor. It was routine for orderlies to go out on the lawn to retrieve the wayward instruments after Dr Hunt finished his surgical day (Brett Arena, archivist, St Vincent Medical Center Historical Conservancy, oral communication, September 2003).

Hunt was equally demanding of his anesthetists, and if he did not like the way they worked, he told them about it and would never have them again as his anesthetist. On one occasion Hunt operated at another hospital in Los Angeles, where Dr William Chalmers-Francis was head of the anesthesia group, and he provided the anesthesia for Hunt. The results were very unsatisfactory to Hunt, and he never asked Chalmers-Francis to administer another anesthetic for him. It was not the end of the Hunt-Chalmers-Francis association however.

There also was some bad blood and professional rivalry between other staff physicians who trained at Mayo and those who trained in Southern California.¹¹ This all undoubtedly helped make a bad situation worse.

The move to Los Angeles

There were no nurse anesthetists at St Vincent’s at that time. Anesthesia was provided by other surgeons, house officers (surgical residents), or interns. Never hav-

ing had a death on the operating table before, Hunt had his first one at St Vincent's. A physician who gave the anesthetic administered an overdose and the patient died of asphyxiation.⁹

Hunt sent a telegram to the Mayo Clinic. He had worked with many nurse anesthetists there, liked the quality of their work, and had a particular appreciation for the work of Dagmar Nelson. He asked Nelson to come to Los Angeles and be his anesthetist. He told her that she would be his exclusive anesthetist, she would be employed by the hospital, work for the hospital when she was not giving anesthesia for him, and be available to other surgeons if they wanted her for anesthesia.⁹

She accepted and secured a registered nurse license in California by transfer agreement from the state of Minnesota.¹² She obtained an apartment 2 blocks from the hospital and quickly adapted to the Southern California lifestyle. She became an avid sunbather and spent hours on the roof of her apartment reading her favorite books. From then on, her family said, she always had a dark tan (Dan Nelson, oral communication, August 2004).

Moving toward a trial

In the previous 3 years, physician anesthetists (they did not call themselves anesthesiologists for several more years) had been trying to rid the county of nurse anesthetists. According to Virginia S. Thatcher, they attempted twice to get an attorney general of California to render a formal opinion that anesthesia administration was the practice of medicine. On both attempts he sided with the nurses. Despite that, the physicians circulated a letter to hospitals in Los Angeles saying that the

attorney general had opined in their favor.¹³ Nurse anesthetist Florence Henderson, who had moved to Los Angeles from Rochester, Minn, and the Mayo Clinic, lost her job over this incident. In a letter to Dr William J. Mayo, she told him about the problem, and he offered her a job if she returned. She thanked him, but said that she had to stay in Los Angeles to care for her mother.¹⁴

Nurse anesthetist Adeline Curtis was not one to accept this without a fight. She hired a lawyer to investigate the issue and to obtain a definitive letter and official opinion from the California attorney general. It took several months, but she got it. She then took it upon herself to take a leave of absence from her work and traveled around the state to show the letter to hospital leaders, especially those who had believed the contrary correspondence they had previously received.¹⁵

Then, in 1928, physician anesthetists got a statement produced by the California Board of Medical Examiners that said anesthesia was the practice of medicine. Some nurse anesthetists lost their jobs over this. In other cases, hospitals simply chose to ignore the statement. St Vincent's Hospital was one of them.¹⁰

Since Nelson was the only nurse anesthetist at St Vincent's and Hunt was collecting enemies, Nelson and St Vincent's Hospital became a prime target. Physician anesthetists, lead by Dr Chalmers-Francis, filed an injunction to restrain Nelson and St Vincent's Hospital from "practicing medicine without a license." St Vincent's was named in the suit because it employed Nelson, knowing that she was a nurse who did not hold a medical license.¹⁶ Hunt, Adeline Curtis, and Sophie

Jevné helped pay for the defense of the case (Joyce Kelly, oral communication, August 2003.)

At a pretrial hearing, the defense attempted to get the case dropped by claiming that the parties named as plaintiffs did not have standing to bring the action. The judge accepted part of the argument ruling that "the anesthesia section of the Los Angeles County Medical Society" could not be a party to the suit; however, the individual physician members could sue if they desired.¹⁰

After that hearing, someone whom the Los Angeles County Medical Association considered "reputable" had a news item inserted into its publication, *The Bulletin*, that said the judge had ruled in their favor and that anesthesia was ruled to be the practice of medicine.¹⁷ Nelson's attorneys wrote a strong letter of complaint to the association for the false publication. The following month *The Bulletin* published a retraction.¹⁸

Part 2 of this 2-part column on "The life and trial of Dagmar Nelson," to be published in the August 2006 *AANA Journal*, will discuss the trial, appeals, and the tragic ending of the Hunt-Nelson friendship.

REFERENCES

1. Nelson DA. *California Application for: Certificate as Registered Nurse without examination*, dated August 20, 1932. California Board of Nursing, Sacramento.
2. City Directory, St Paul, Minn, 1892.
3. Nelson DA. *Minnesota Application for Certificate as Registered Nurse*, dated July 10, 1923. Minnesota Board of Nursing.
4. Mayo Foundation for Medical Education and Research. History of the Mayo Clinic. Available at: <http://www.mayoclinic.org/about/history.html>. Accessed April 20, 2005.
5. The Center for the Study of Technology and Society. Today in Technology History. Available at: <http://www.tecsoc.org/pubs/history/2002/sep23.htm>. Accessed April 20, 2005.
6. St Mary's Hospital Archival Documents, Mayo Clinic Historical Unit, Rochester, Minn.

7. Pietrusza D. *The Roaring Twenties*. San Diego, Calif: Lucent Books; 1998.
8. Volstead Act. Available at: <http://www.u-s-history.com/pages/h1086.html>. Accessed April 29, 2005.
9. Hartzell J. *Mrs. Charlie, the Other Mayo*. Gobles, Mich: Avri Books; 2000.
10. *Chalmers-Francis v Nelson*. Trial Transcript. Park Ridge, Ill: Archives, American Association of Nurse Anesthetists.
11. John B. Doyle, Jr, MD, oral history recording. St Vincent Medical Center Historical Conservancy, Los Angeles, Calif.
12. Hunt VC. The present-day sphere of the nurse anesthetist. *Bull Amer Assoc Nurse Anesth*. 1941;9:320-324.
13. Thatcher VS. *History of Anesthesia with Emphasis on the Nurse Specialist*. Philadelphia, Pa: JB Lippincott; 1953. Available at: <http://www.aana.com/archives/thatcher.asp>. Accessed April 20, 2005.
14. Correspondence between Florence Henderson and William J. Mayo. Archives, Mayo Clinic Historical Unit, Rochester, Minn.
15. Curtis A. An early history from the CANA Archives. *California Association of Nurse Anesthetists, Inc* (Newsletter). May 1935.
16. *William V. Chalmers-Francis et al v Dagmar A. Nelson and St Vincent's Hospital*, a corporation. Superior Court, Los Angeles County, Los Angeles, Calif. Complaint for Injunction, filed October 15, 1933.
17. Los Angeles County Medical Association. *The Bulletin*. April 19, 1934;44:312.
18. Los Angeles County Medical Association. *The Bulletin*. May 3, 1934;44:358.

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