Overseas Teaching Program: Legacy of the SS HOPE

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The SS HOPE, the world's first peacetime hospital ship, voyaged outside the United States eight times between 1960 and 1973. Retired in 1974, the SS HOPE survives as the model for the ASA Overseas Teaching Program (OTP).

Figure 1. SS HOPE docked in the sugar port of Maceio, Brazil, in 1973.

William Walsh, M.D., founded Project HOPE in 1958 and acquired the mothballed World War II hospital ship, USNS Consolation. Refitted, the ship embarked in 1960 as the SS HOPE. It contained three operating rooms. Although the SS HOPE was much smaller than current naval hospital ships, it fit the core mission of Project HOPE well — to teach and assist local doctors and nurses. Project HOPE characterized this as "helping people to help themselves," which differed from most overseas medical services that emphasized patient care. Project HOPE leaders often quoted the Chinese proverb, "To feed a person for a day, give him a fish. To feed him for a lifetime, teach him to fish."

The SS HOPE last voyaged in 1973 to Maceio, Brazil, a sugar port [Figure 1]. A senior resident then, I flew to Maceio with Brett B. Gutsche, M.D., a faculty anesthesiologist, and joined 29 other physicians and dentists aboard the docked ship. We followed the HOPE plan for Maceio: "One anesthesiologist would be expected to work on shore. He should be primarily responsible for setting up a functioning anesthesia department and supervising the development of a recovery room, ICU and inhalation therapy department. The ship-based anesthesiologist should be responsible for teaching resident physicians while on the ship, using modern techniques."

Dr. Gutsche and I alternated these duties. Aboard the ship we supervised nurse anesthetists and taught Brazilian medical students, surgeons and anesthesiologists. Frequent surgical procedures included splenectomies for shistosomiasis and intestinal resections for Chagas' disease (trypanosomiasis). We induced anesthesia with thiopental, maintained it with halothane and administered tubocurare for muscle relaxation. We monitored patients with precordial stethoscopes and electrocardiography.

In town we worked side by side with 14 Brazilian anesthesiologists. Most were self-taught and had admirable practical skills. We learned to use the sparse equipment effectively. There were tanks of oxygen but no nitrous oxide. Venturi devices attached to the oxygen lines provided suction. We administered methoxyflurane by bubbling oxygen through a small vaporizer and connecting the outflow to a bag, valve and mask or endotracheal tube [Figure 2]. Other drugs included thiopental, methohexital, Innovar (a fentanyl-droperidol combination), succinylcholine and curare. For regional anesthesia, we administered dibucaine and lidocaine, using glass syringes and reusable needles.

After Project HOPE abandoned the ship due to its high expense, some alumni anesthesiologists founded the OTP within ASA. Nicholas M. Greene, M.D., (1922-2004) the first chair of the OTP and the anesthesiologist most responsible for its founding, had served on the 1969 voyage of the SS HOPE to Tunisia. The philosophy of the OTP, as described by Dr. Greene, echoes that of Project HOPE: "While there are several outstanding volunteer medical programs based in the Western World, including the United States, that supply anesthesia coverage in underdeveloped countries … the ASA/FAER-sponsored OTP is unique in several ways, including: 1) OTP emphasizes teaching, not the takeover of clinical care (and 2) OTP is designed to support only pre-existing, structured anesthesia training programs headed by an anesthetist as director."

Mark P. Colip, M.D., OTP chair in 1996, described the philosophy as "to promote self-reliance through on-site teaching assistance." Phillip O. Bridenbaugh, M.D., current
Overseas Adventures in Anesthesia

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Bugando Medical Centre is one of four major hospitals in Tanzania, an East African country of 32 million people. With only 1,200 doctors, Tanzania depends on international help, especially in anesthesiology. I spent a month of my CA-3 resident training in Bugando. It was a valuable experience, an incredible adventure and something I will remember forever.

I found the position through Health Volunteers Overseas, which assists anesthesia programs in several countries, and the Society for Education in Anesthesia (SEA), which sponsors instructors for Bugando. I also received a SEA/Ronald L. Katz Traveling Fellowship from SEA. My department chair, medical school dean and American Board of Anesthesiology administrators approved the month as part of my residency training.

Bugando is located in Mwanza, a city of 600,000, on the eastern shore of Lake Victoria. Mount Kilimanjaro, the Serengeti Plain and the Olduvai Gorge, site of the earliest humanoid skeletons, are nearby.

Bugando lists 800 beds, and I saw as many as four infants in one bed. The need for health care at Bugando is great, and the capacity limited. During my time there, two anesthesiologists, several assistants and a dozen students provided the anesthesia. Figure 1 shows this collegial group. General, trauma and gynecologic surgical procedures predominated, reflecting the specialists present during the month.

My typical day started at 7:30 a.m. with morning report. Call personnel reported on overnight activities, and nurse anesthesia students presented their cases for the day. After morning report, I either worked in the operating theatres or attended intensive care unit rounds. After lunch I prepared lectures that I gave at 3 p.m. to the anesthesia or medical students.

Our primary anesthetic drugs were thiopental, ketamine, halothane and ether. I learned to use draw-over vaporizers, the Epstein-Macintosh-Oxford for ether and the in-line Oxford Miniature for halothane.

The overseas training month required planning. In

References:
2. Archival documents, Project HOPE, Millwood, VA.
3. Greene NM. Overseas teaching program to make its debut in Africa. ASA News 1990;54(10);6-11.

Figure 2. Anesthesia in a surgical office in Maceio, Brazil, in 1973. The hose from the oxygen tank connects to a methoxyflurane vaporizer and a small mechanical ventilator.