Helping Missionaries in Hispaniola by Newel G. Daines, M.D.

THE LDS Church called My Wife, Jean, and me to serve a medical mission in the Dominican Republic beginning July 20, 1992. I retired from active medical practice July 1.

I had been practicing anesthesiology in Logan, Utah, since 1957 after a residency at the University of Utah that followed seven years of general practice interspersed with medical service during the Korean War.

This mission call took me back to my first medical practice very rapidly. After eight weeks at the MTC, with some acquisition of basic Spanish language capability, we arrived in Santo Domingo, the capital city of this Third World Republic, situated in the northern Caribbean. The population of the D.R. is 8 to 10 million, about a third of which is in the Santo Domingo area along the south central Caribbean coast. This country does not contain a single sewage treatment facility.



We were directed to care for the health of all the missionaries in the country—about 550 in the three missions. Santo Domingo was equally divided between the east and west missions that extended east and west in the long axis of the country from the strait dividing the island from Puerto Rico and then west to the Haitian border. The country is about 350 kilometers east to west and 200 kilometers north to south. The north or Santiago Mission is headquartered in the capital, the second largest city in the country, with a population of about 500,000, lying in the fertile Yaque River valley about 80 kilometers

guards and good exterior maintenance, so Jean and I could spend all our time in the care of the missionaries.

We found significant lost time and illness from gastroenteritis, Dengue fever bacterial and fungal skin infections, a high incidence of uncus incarnatus, and the usual respiratory diseases. I had been forewarned about many of these things and had started a crash refresher course in tropical medicine outlined by my son Richard, an internist-administrator at St. Barnabas Hospital in New York City. He immediately sent me the newest edition of *Manson's Tropical Diseases* and another infec-

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south of the north coast along the Atlantic Ocean. This is the area of the first landfall of Columbus in the Western Hemisphere.

On arrival in the mission, with the advice and assistance of the mission presidents, we decided to establish an infirmary. The hospital facilities, even in the capital, were about like those of the '50s or '60s in the U.S., and the missions in the south had many problems with just basic custodial medical care for the minor illnesses. We leased a large condominium with four bedrooms and three baths, providing us four infirmary beds and space for a small pharmacy. This condo had 24-hour armed

tious disease text by British authors who seem to be the authorities on tropical diseases. For about six years Richard had been including Dominican medical personnel in the teaching program at St. Barnabas and had been to the D.R. selecting residents for the program. With this connection he was a great help in identifying qualified consultants for help in the D.R. Oddly, just two days after our arrival in the D.R. Richard came to Santiago to deliver two papers to the Dominican Society of Internal Medicine that had been scheduled months before our call.

We scheduled sick call on Mondays, the missionaries'

"P Day," in the east mission office, about 15 minutes from our condo. I would see from 10 to 20 missionaries, draw blood samples for laboratory work and occasionally take them over to the Abreu Clinic for X rays if needed. We would schedule the minor surgery, usually wedge resections of great toenails, removal of moles, and I and D of small abscesses. We would do the toes in the evening and keep them overnight with the toe elevated, and with the good American food, they would be back in full service in the 90-degree heat with 90 percent humidity.

On Tuesdays we would hold the same type of sick call for the west mission in our condo. Since we lived close to the border of the east mission, the president gave permission for any missionaries needing care at any time to come over to our condo to be seen. As half of all the missionaries in both the east and west missions were stationed in the greater Santo Domingo area, we made many house calls at odd hours. It was much easier for us to go to the sick missionaries than for them to come to us. We had an excellent city map and got to know about half of the missionary quarters in the Santo Domingo area and beyond. We traveled all over the island and identified some intolerable living quarters for the mission presidents.

Each Wednesday we drove about two and a half hours up through the beautiful mountain valleys to Santiago and started the usual sick call for the northern mission. The main route north, D.R. #1, was narrow and congested with trucks and buses and wild drivers, and the 60 or 70 trips were stressful experiences. Fortunately, the Santiago Mission president's wife was a choice, mature nurse, and with the help of a perceptive, young nurse-missionary, they screened sick missionaries carefully, and with the help of excellent telephone service and consultation, I usually knew what was going on and who was ill.

The mission home provided a room with two beds for inpatient care, where the nurses could give intravenous fluids and bed care. With these two areas—our infirmary in Santo Domingo and the mission home in Santiago—it was a rare missionary who had to be hospitalized in the second-rate institutions. We did several minor surgeries in the Santiago mission home, since there was some follow-up available.

We identified several well-qualified consultants in both of the large cities, and they were always most cooperative and kind. The director of the National Viral Laboratory, a native of and trained in New York City, was especially helpful in the diagnosis of the mosquito-transmitted Dengue fever. She provided gratuitous laboratory studies, and together we compiled the best study of Dengue in the country. With the susceptible missionary group and my multitudinous samples, she prepared a paper and presented it at the World Congress on Dengue in Havana. Since she was a U.S. citizen, her trip to Cuba would have

been impossible except for the influence of the new General Authority, James Mason, who had contacts in the World Health Organization.

Another world-class authority on Dengue is Dr. Duane Gubler from Santa Clara, Utah, who is the expert on Dengue in the USPH and has lived in Puerto Rico and Indonesia while studying the disease during epidemics. Dr. Gubler helped me outline diagnostic criteria. The incidence of malaria is very low, with most reported cases along the Haitian border. No cases among missionaries were identified during my service.

Acute lymphoblastic leukemia, keep palmer abscess requiring extensive surgery, progressive myocardial insufficiency requiring return home, metastatic carcinoma of liver and lung, measles, mumps, shigellosis, ameobiasis, toxoplasmosis, and all the rest of the parasites were common. Tenia, everywhere and everyone, was so common in the heat and humidity. Bacterial infections of superficial abrasions and lacerations often rapidly progressed to lymphangitis and lymphadenitis and required bed rest, large doses of antibiotics that were easily available, and good food and care by Jean, leading to a rapid recovery. The mission presidents asked her why it took three extra missionaries to deliver one sick one to the condo. The warm shower, clean bed, sterile water to drink, and a fan when the electricity was working did wonders for these young men and women. Temperatures of 104 degreesplus were especially common with Dengue and the only treatment was fluids, rest, and temperature control.

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I even returned to some pediatric practice, caring for the 15 children of the two mission presidents and one family from Cache Valley who had been assigned there by the Presiding Bishop's Office as they gear up to build a temple for the whole Caribbean. With about 40,000 members, it was impossible for me to get involved in their health care, but I provided the missionaries with information to give members when the missionaries were asked about medical problems.

We really enjoyed our experience and would encourage those who can to extend yourselves and provide care in the Third World countries.