Miracle in Haiti

It is nearly a week after a 7.0-magnitude earthquake devastates Haiti. Jeremiah Nielson, D.O., who completed pediatric residency training at the University of Nevada School of Medicine in Las Vegas, and now lives in Los Angeles, feels compelled to travel to the ravaged country and help. Three thousand miles and a few days later, Nielson is in Port-au-Prince assisting in the medical effort and caring for some of the youngest survivors of what is now one of the deadliest natural disasters in modern history. Nielson recounts his week-long mission in Haiti, including the “miracle” story of two premature twins born at 30 weeks’ gestation, who overcame incredible odds to live, in a telephone interview on Feb. 11.

**Edgar Antonio Núñez**: Explain to me how you got involved in Haiti.

**Jeremiah Nielson**: I’m doing a fellowship at University of Southern California at Childrens Hospital Los Angeles. Some of the pediatric surgeons and pediatric surgery fellows there work with a group called Project Medishare that was going to Haiti to hold clinics. One of the pediatric surgery fellows told me he was going to Haiti and I asked if he could get me on the flight. He arranged it so I could get from Miami to Haiti. I just had to get a flight to Miami, so I bought a flight from Los Angeles to Miami.

I got to Miami and got on the plane to Haiti.
Some planes were turned around, but ours made it in. There was only one landing strip. Plane after plane after plane was landing and then taking off. Almost all the planes were military planes and cargo planes. There were only a few planes that carried civilians. These flights were donated to Project Medishare by private companies or individuals.

We flew in on a 737. After we landed, we loaded our stuff onto a truck and they drove us to the hospital that the University of Miami and Project Medishare had set up. It was right off the main campus of the airport, about a five-minute drive.

It turned out to be very hectic. This was about a week after the earthquake. Things were still very disorganized. Project Medishare was the most organized, other than maybe the U.S. military.

The hospital was fenced-off so the general public couldn’t come inside. There were a lot of people who wanted to look for loved ones or get medical care, as well as people looking for work, trying to help and earn some money.

There was a security team out of Las Vegas made up of former Navy SEALs and Rangers. They donated a week of their time to Project Medishare and the University of Miami, and they guarded the hospital and the camp. Before the security team got there, a lot of people were breaking into the camp at night and stealing things out of the storage tent, trying to find food and goods, which was understandable under the circumstances. We felt safe after the security forces arrived.

The set-up for the hospital was four tents, including two patient-care tents. One had an operating room and about 75 beds for adults. Another tent had room for about 70 pediatric patients. Another tent was our sleeping quarters with cots. And the last tent was for storage. Supplies were brought in every day: medications, dressings and operating equipment. Everything was placed haphazardly under that tent and volunteers would go through it and sort it out and figure out what goes where.

EAN: What was the scope of the operation in terms of the number of pediatricians, residents and fellows? Did you get a sense of that under the circumstances?

JN: When I got there it was still somewhat disorganized and the doctors were overwhelmed. There were only two pediatricians for all of the patients and maybe two nurses who were helping with pediatrics. There were about 60 or 75 pediatric patients when I got there.

On the adult side it was similar. They had one or two physicians and maybe four nurses taking care of about 150 patients.

We met with them the first night. They gave us a tour of the place and told us how they had everything working. By the time we arrived, the doctors were burnt-out. They turned everything over to us.

We had four pediatricians, including a pediatric orthopedic surgeon, a plastic surgeon, a pediatric surgeon and myself. We brought four nurses and three OR nurses, so we could have a functional operating room.

EAN: How many from USC were involved in this particular effort?

JN: There were three of us from USC and the two pediatric surgeons who were my contacts; they went to Haiti a couple of days before me.

We took over the pediatrics part of the operation from the doctors who had been there for a week. We updated the record-keeping system. Before we arrived, it was a piece of paper taped on a patient’s bed, basically just the patient’s name and what happened. We made it a little more organized, writing orders for medications and updating as we went along.

We had a pediatric pharmacist who came with us, too. The pharmacy was two pulled-out tables that had all the medications piled on top of one another. We had lots of IV fluids, although we didn’t always have the right ones for what we needed, but different shipments would come in every day. We had plenty of pain medication, which was good because there were so many orthopedic injuries, head injuries and burns. We had a lot of antibiotics, and for the pediatric patients, we had formula.

EAN: So you didn’t necessarily treat the people who were immediately impacted by the earthquake, but whose conditions worsened because they hadn’t received care for a week or so?

JN: They were still pulling people out of the rubble at that time. Paramedics and ambulances would drop off patients. Some of them had been trapped in the rubble for seven or eight days and hadn’t had any water or food and were in shock. Some were injured, but hadn’t made it to a hospital and had serious infections or amputations. They also brought in some children with head injuries who were comatose.

It took a long time to get some of these patients to the hospital even though the ambulances were all working overtime bringing people in. The U.S. government had their ambulances bringing people in, as well as the volunteer paramedics.

Haiti’s whole system of hospitals and paramedics was just destroyed.

EAN: With all the countries and NGOs sending personnel and aid to Haiti, was it a collaborative effort or did each organization build its own hospitals and the like?

JN: It seemed like everybody had their own thing. Our tent was mostly Americans.

We collaborated with a few other teams, mostly an Israeli hospital camp. The Israelis had shipped over a M.A.S.H.-like portable military hospital. They were very organized. They had more capabilities in some senses than we did. They could run lab tests and their operating rooms were a little more sophisticated. But, they couldn’t handle very many patients. They had to turn many away. They triaged very carefully and chose which patients they could attend to.
Any patients who came to our hospital, we would take care of them no matter what.

I also met people from the French military and reporters from Portugal. There were other groups, but as far as hospitals were concerned, the Israelis and our group were the only ones I really interacted with.

**EAN:** In terms of supplies, was it more a matter of the sheer volume of it coming in all at once, not so much that there wasn't enough?

**JN:** It was a little bit of both. We had just enough medical supplies to get by. There was only one plane that could come through to bring supplies for us. It would bring people and then it would only be loaded with supplies from the University of Miami and Project Medishare.

For example, we didn’t have any food for most of the time I was there and the patients didn’t have any food either. I was there for six days. The two days before I left, they started making warm meals, so patients who could eat would get one warm meal per day. For most of the time I was there, the only food that we had to give to the children and patients were animal crackers and water. That’s all they had to eat. We didn’t have any food either. The only thing I ate during the time I was there were granola bars and a bag of beef jerky that I had brought with me.

**EAN:** How many patients would you say your team attended to, or was it hard to keep count because of the overwhelming number of patients?

**JN:** Yes, it was hard to keep count. With the pediatric patients, we handled 30 or 40 cases a day. Mostly orthopedic injuries, burns and treating of wounds. Ambulances would come in constantly during the day and intermittently during the night. Many patients would be treated as outpatients, for example, they might get a splint, be given antibiotics or pain medicine, discharged and instructed to come back the next day for more treatment.

For the ones that had to be admitted—probably 30 a day—we had to move them for the next group of patients who were coming the next day. We got a little backed up. By the time I left, there were 90 patients in the pediatric area.

There were a few barriers to discharging patients. It was sad because their homes were in ruins. If they had family or contact with neighbors or somebody that had some type of shelter, even if it was only a blanket over the rubble, that’s where we had to send people.

There were a lot of children who didn’t have anybody. Their parents had been killed or their family was missing and they were orphans or assumed to be orphans.

UNICEF was helping us to place those children. They would help us with at least five children a day. They tried to put a limit at five, but we were good at talking them into finding placement for more. The children would be sent to an American orphanage or a couple of other places.

**EAN:** Where did the physicians sleep and take care of basic necessities? Was it there on site?

**JN:** We slept on cots and everyone brought their own sleeping bags. When we got there, there was only one outhouse for the whole hospital the first few days.

Within walking distance of the hospital, a 15 to 20-minute walk, was the United Nations headquarters. It had restrooms and showers. Every couple of days, everyone would try to sneak away, catch a shower and even get a warm meal at their cafeteria.

**EAN:** Describe to me what the level of destruction was from your vantage point?

**JN:** For most of the time I was only in the hospital. I didn’t really see anything except the airport. The airport itself wasn’t collapsed, but all the walls had large cracks. Nobody dared go inside because if there was another aftershock, it might collapse.

Near the end of my stay, I became friends with a reporter from Portugal. She was going into the middle of the city to do a story. I asked her if I could go with her. I took pictures and had a brief tour of downtown.

The devastation was incredible. Buildings smashed flat or toppled over. Many people crowded the streets. People had set up makeshift tents with blankets or tarps over their heads. Basically people were living outside, on the streets, because most of their homes were crushed, collapsed or unstable.

As we were driving past downtown, the smell was horrible. When we drove by a big building that was crushed flat, the smell was awful. You could imagine how many bodies were still in the rubble.

**EAN:** Tell me about the twin preemies.

**JN:** While I was in Haiti, there were about 10 babies who were born at our hospital and there were many other babies born throughout Port-au-Prince who were brought to our hospital. As a neonatology fellow, I took charge of the newborns.

The second day that we were there, there was a set of twins who were born ten weeks prematurely, so they were 30 weeks’ gestational age when they were born.

Their mom started having seizures during the earthquake. She had a seizure disorder, but she normally didn’t have seizures. When the earthquake happened, she was injured and then she had continual seizures, which sent her into labor. She delivered the babies basically in the rubble of their home.

The mom continued having seizures, almost one after another for the next week. An aunt was pretty much the only family the babies had, so she tried to feed them water since the mother couldn’t breast-feed. Finally, the aunt was able to get the babies to our hospital after about a week.

It’s amazing that they lived that long.

Normally, babies who are born at 30 weeks, even at a children’s hospital like Childrens Hospital Los Angeles or University Medical Center in Las Vegas, go to a neonatal intensive care unit and usually have many complications.
These babies were strong. When they got to our hospital, they were very sick and in shock. We had to resuscitate them. They were very dehydrated. Their electrolyte levels were probably awfully low. We didn’t have lab tests, so we couldn’t check electrolyte levels or run blood tests.

After we resuscitated them, someone found … not incubators, they were more like little, suitcase-type contraptions. That was definitely the best thing we had for them, because otherwise, they would just be on an open cot, wrapped up in blankets. Before that, we had bins, like wash basins, that they were placed in. But, they were freezing. We couldn’t keep them warm. Even though the temperature in Haiti was in the 80s, they were still premature and susceptible to losing body temperature.

We kept them in these semi-incubators. We had antibiotics for them and were able to provide them with IV fluids. We didn’t have any nutrition that we could give them through IV, so we started feeding them a little bit through the mouth, through an intragastric tube into their stomachs.

I knew if we didn’t transfer them out, these babies had a high chance of dying. We had started transferring patients, mostly head injuries and trauma patients who were dying, either to the USNS Comfort naval ship or to Miami Children’s Hospital.

I needed to transfer these babies out, but they were at the bottom of the waiting list, because there were patients who were in more dire need, who were imminently likely to die.

Luckily, John Edwards, the U.S. senator from North Carolina, was there in Port-au-Prince getting a tour of the city. He heard about these little preemies; he came to the tent area and he was so impressed with the fact that we couldn’t get them transported, he offered to transport the babies on his jet.

The night that they came to us, we stabilized them and got them started on antibiotics and feeding. That night we were able to transport them to Miami Children’s Hospital.

EAN: The preemies are now in Miami?

JN: Yes, they’re at Miami Children’s Hospital right now. The aunt, who is the only family that we know of, had to go with them because a family member needs to transport with them. She wasn’t really excited about going to Miami, but she really had no other choice.

When I got back to Los Angeles, I contacted the hospital and the babies were doing well.

EAN: Do you know what happened to the mother?

JN: The last day I was in Haiti, they brought the mom to our hospital and she was having seizures intermittently. She was very weak. The adult side of the hospital was taking care of her and I updated her on how her babies were doing. She said that, hopefully, when she gets well, she would be able to go to Miami and be with them.

EAN: The chances of the babies surviving under normal circumstances were slim, you say. Now, in the middle of an earthquake and its aftermath, medical care is rudimentary. Can this be considered a miracle? The odds of survival seemed extremely small.

JN: Yes, I really think it was a miracle that they lived that long. We have babies that are born at 30 weeks gestation under optimal circumstances in our hospitals here in the U.S. and even then, we have a really difficult time treating them and keeping them well.

These babies survived just on water for eight days and they were literally living in the rubble.

Edgar Antonio Núñez is creative director for the University of Nevada School of Medicine. This article is reprinted with permission from Synapse, the magazine of the University of Nevada School of Medicine. For a slide show with more photos from Jeremiah Nielson taken in Haiti, see the online version at: http://www.medicine.nevada.edu/synapse/spring2010/miracle-in-haiti.html. 

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