

The First Medical Delegation Visits Nuñoa

by Elizabeth Erickson, PA-C

My involvement in the medical part of the Nunoa Project all started with an email from a Valley Medical Group colleague about a travel opportunity in Peru.

Then after exploring the Nunoa Project website thoroughly and meeting with Dr Steve Purdy, I pondered the project which seemed remarkably perfect for me. I've always wanted to travel to Peru, I've always wanted to experience life in an indigenous population, largely unspoiled by Western Culture, and I've always wanted to use my medical skills in such a way, as my mother recalls, "to help people who really need help". I called upon Dr Jane Cross, pediatrician at Holyoke Pediatrics, regarding her experience providing health care in the rural Altiplano and I got some guidance from Jenny Foster, PhD a midwife colleague, and anthropologist (student of Dr Brooke Thomas's), and now teacher at Emory College. Each of these folks were tremendously helpful in advising me about what to look for in this type of work and how to do it properly.

Once my decision was made to go to Nunoa, I talked to everyone I knew in an attempt to find another medical practitioner, and I recruited my daughter Julie to come as my translator. Once Tara decided to join the project things started to get rolling. I reached out to the staff at Valley Medical Group for unused equipment, supplies and medications as well as donations. Valley Medical staff responded with overwhelming enthusiasm by producing more than 4 large suitcases full of medical supplies and over \$1000.00 with which we purchased medications and supplies.

Our next task was to contact el doctor Blanco in Peru to ask what he'd like of us. After a few failed attempts to reach him on his cell phone, with the help of our esteemed translator Nancy Sternbach, we finally wrote him an email, and lo and behold..He responded. So we had some guidance about what was needed, what we should bring, and proceeded to gather those things, order those medications. Lois Kelley our nursing supervisor at Northampton VMG enthusiastically helped me put together an order of the medications requested through the company VMG uses.

Our first medical delegation to the Centro de Salud de Nunoa had what we feel was a very exciting and gratifying stay in Nunoa between January 6th and 12th of 2010. After a day of acclimating to the altitude in Cuzco we took the 4 and 1/2 hour drive into the Altiplano to arrive in Nunoa to be greeted first by the huge statues of alpacas at the entrance to the town, and then with an overwhelmingly warm greeting from la doctora Joanna, who indicated that she and the rest of the staff were expecting us and very happy to have us visit.

After putting our bags in our empty surgical suite at the hospital where we camped during our stay in Nunoa, we were taken to one of two restaurants in the town for lunch on the town (soup rice and potatoes), with la doctora Joanna and the health center's social worker Yeny where we began our briefing about the many services available at the Centro de Salud. Joanna and Yeny were full of excitement and energy and very proud of the services they could offer at the center, and told us as much as time allowed about the work of the center as well as their plans for us to see patients, meet with all the different members of the staff on a variety of occasions and to visit a rural health center, a community of alpaca herders called Huaycho about an hour and 1/2 out of town to the north. On our return to the health center we got a complete tour of the health center with explanations about the services offered there including nutrition, dentistry, prenatal care, pharmacy, lab, and the soon to be opened xray and ultrasound rooms. There were empty hospital rooms where patients stayed when inpatient care was needed both for pediatric patients and adults, which were empty at the time. In addition we were shown all the empty space in the building where they hoped to house surgical suites in the future.

After another meeting with our whole group and the medical staff where they described their needs to us, we thought we were ready to catch our breath, we realized that the night was young when we were invited to celebrate Dr Joanna's birthday with the staff at a dancing party upstairs in the old health center building. It was a bit much for some of us to try to dance our first night at an altitude of 14,000 feet. Some of us lasted longer than others, and our 15 year old student Dylan was the hit of the party, dancing with the various medical staff members for a good part of the evening.

The following morning we came down to the clinic prepared to see patients and brought our 3 suitcases full of medical supplies to the pharmacy where Freddy * and others unloaded and examined the supplies we brought. Tara and I each had a medical assistant, and Julie ended up translating for Tara. I had a wonderful young woman, Vanessa to act as my translator, who had studied some English while she trained to be a pharmacy technician in Cuzco. Vanessa spoke no English really, but knew enough about medicine that our communication about patient's problems during the day was wonderful. She was able to translate from Quechua to a form of Spanish that I could understand, and then could translate my poor Spanish back to the patients.

The range of patients I proceeded to see for the next couple of days in Nunoa was large, and my experience in figuring how to use my medical knowledge in Nunoa was a major challenge.

Both Tara and I saw children with colds and coughs for no more than 24 hours, as well as adults and children with coughing that lasted a bit longer. At home these were things that we wouldn't treat with antibiotics, and we were quickly briefed that anybody with a cough for a few days and a low grade fever (which we thought was bronchitis) would get treated with 5 days of antibiotics, and that anyone with a cough longer than 15 days was a TB suspect.

I took care of sore shoulders, gall bladder pain a woman who'd been kicked in the eye by an alpaca, pyelonephritis, concerns about a child's growth, and numerous cases of "gastritis". A few cases stand out because they put me in a situation of needing to refer people for specialty care. One was a young man who got a speck of metal in his eye in a metal shop. When I used my otoscope to examine him, his cornea was completely white with scarring from prior such injuries. At home I could have examined his eye with an ultraviolet light and a stain called fluoresceine to identify the speck, and I could have removed this with a simple piece of equipment,(though usually these days I would have a specialist do this due their easy proximity) but as none of these supplies or specialists were available I couldn't treat him and suggested he take the 2 and a 1/2 hour trip to Ayaviri over bumpy roads to see an ophthalmologist.

When I saw the child whose mother was concerned that she wasn't growing well I was unable to put my fingers on a growth curve, so I tried to collect data and plot the heights and weights which were in the chart, so I could make my own graph, which was quite time consuming. In the long run it seemed that the girl was a terribly healthy 5 year with small stature, who recited a traditional Peruvian poem for us, which Julie videotaped on her iPhone.**

I saw a teenaged woman who la doctora Joanna had been following for several months with TB encephalitis who was still very sick with this despite treatment. This woman was still having tremendous head pain 6 months after starting treatment, was in a wheelchair and was too weak to get out of it. While the peruvian la doctora Joanna stepped in to take care of this patient, my assessment was that this girl was that she would benefit from some physical therapy but there was no Physical Therapy in Nunoa, nor was there any consciousness of PT in the minds of any of the medical people we worked with.

I saw an 84 year old man with a nosebleed for several months, much worse in the past few days, which turned out to be a large tumor in the nose. I advised him to see an ENT surgeon to evaluate and treat this. In retrospect I wonder if he would follow through with this recommendation.

Then I saw a 76 year old woman who had chest pain with walking and eating over several months. The pain was increasing in frequency and intensity over the past few weeks, which I diagnosed, with no EKG or labs available, what we call crescendo angina. In my usual mode of functioning I told her she needed to be seen at the hospital where she could be assessed and treated appropriately, but in my attempt to make this referral happen, I ran into resistance first from my medical assistant, and then staff doctor who didn't rush to get her to Ayaviri for treatment. and just shrugged his shoulders when I pestered him to help this happen. In retrospect I realized that this peasant woman wasn't going to take the bus over rough road for 2 and 1/2 hour to the hospital at Ayaviri. Even if she did make that trip it is very unlikely that the Peruvian national health insurance available to everyone would cover the treatment for blocked vessels in the heart. What this woman really needed wasn't a referral but an explanation about the cause of her pain and some medication to alleviate the symptoms. At the health center there were no beta blockers, no long acting nitrates. The

only things I could offer this patient were a daily aspirin tablet and short acting nitroglycerin for when she had the pain.

When I saw the patient's with "gastritis" or stomach pain and saw that they had been treated with antibiotics a few months earlier, I began to suspect that they didn't just have the usual the GERD we see so often in the US. Especially after hearing from our veterinary partners about the lack of any hygienic measure they saw in their tour of the slaughterhouse in Nunoa I made certain to request cultures of everyone with GI complaints to try to collect some information before treating some unknown organism.

Each of these particular cases among the many other patients I saw indicated a need that the present system of health care in Nunoa couldn't address. No simple eye care material, no EKG or chest xray, few lab tests available, no nearby hospital or specialists .

On our trip to the countryside on day 3 of seeing patients we saw similar problems, and were strongly impressed by the medical responsibility and the skill of the Nurse Lucy who staffed that center alone except for her times of work in Nunoa.

The bottom line that for many patients what they needed couldn't be provided in Nunoa and transportation to the nearest hospital in Ayaviri wasn't affordable to the typical peasant. So while Peru supports a national health insurance plan in order to keep its people healthy so they can be productive citizens and so that children can grow and develop properly, their economy is such that they can provide only a bare minimum of care. In our meetings with the staff the needs of the community pointed to things they felt would be helpful. They asked for equipment to staff a surgical suite so they could perform appendectomies and gall bladder surgery, they wanted equipment to set up a unit where they could provide caesarian section. They wanted incubators for neonates.

When we offered to teach neonatal resuscitation , they felt getting people together for such a training at short notice would be difficult. and declined this.

The one overwhelming need that the entire staff indicated over and over during our stay there, was the need for an ambulance with 4 wheel drive.

Tara's story will exemplify how clear this need became to us during our stay in Nunoa.

For 4 days in Nunoa we each saw between 10 and 15 patients per day, and helped with various meetings and other activities during the afternoons and evenings., all the while struggling with our language and a bit with getting enough air to breathe at that altitude. So after our Sunday patients we joined the rest of the community at the weekly street market where people came to purchase their weekly needs. many kinds of potatoes, herbs, and dozens of different types of corn wooden spoons, spindles, picks, and toys. Just yesterday I noticed the hand over the boy's face in the background, a variety of tools, until everyone loaded back on the truck to head to the countryside.

Our last day in Nunoa we accepted Hernan's gracious invitation to visit the beautiful Mamaniri farm. This was the true challenge to our breathing capacity as we hiked straight up the hills to see the birthing alpacas and the families that watch over them. They were spending their summer months at the higher altitudes so they could apply betadine to the umbilicus of the newborns so Hernan could do a careful newborn exam. We also had lunch at their stone hut.

So I'd like to leave you with the following points.

The Ministry of Health has provided the town with a beautiful new building with the capacity to do a lot, but not enough money to staff or equip the building .

Clearly Nunoa is a place where our contributions to fill their health care needs could make a big difference in the health status of the community if we continue to build a relationship there.

The smaller needs which were clearly identified by the health center staff included:

-Regular visits from practitioners of all sorts : recognizing particularly the need for ophthalmologists, dermatologists, obstetricians and ultrasonographers.

-Regular delivery of basic medicines which they seem to run out of regularly (antibiotics, blood pressure medications, long acting nitroglycerin, and common dermatologic medications, and eye ointments.

-A dental chair and dental lamp, otoscopes and ophthalmoscope (or repair of the ones they have that have fallen into disrepair), a doppler device for fetal monitoring.

-Resuscitation equipment for children and adults, birthing and neonatal equipment including radiant cribs and incubators for newborns, and training in neonatal resuscitation.

-Hospital beds.

-We identified specifically that fluoresceine stain and an ultraviolet lamp as well as training about how to remove a foreign body from the eye would be useful.

Larger needs that they were specifically concerned the staff included obstetrical and surgical equipment so they could begin to do some simple surgical procedures there, but most emphatically they expressed to us over and over that what they most desperately need is a good 4 wheel drive “ambulance” that can reliably travel over those rocky unpaved roads.

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