

Honduras Trip Report – Fall 2018

Department of Family Medicine, University of Rochester

Participants	
<u>Faculty</u> Sophina Calderon Douglas Stockman	<u>Residents</u> Jacob Castiglia Caroline Donohue Patrick Kelly Iza Subczynska
<u>Interpreters</u> Diego, Heidi, Melissa, Paulet	<u>Med Student</u> Nate Holterman
Camera Crew Brian, Josh, Cathy	

Introduction

The Department of Family Medicine at the University of Rochester operates a Global Health Program. This year-round program offers didactic training throughout the year and travels twice a year for two weeks at a time to rural Honduras. The Department has partnered with a rural community called San Jose, San Marcos de la Sierra in the Southwestern state of Intibuca, Honduras. The needs of the target community are great and go beyond curative medicine. By listening to the concerns of the local community members and performing qualitative community assessment, we are creating interventions designed to address the common problems. Below is a report from our May 2018 trip.

Travel and General Comments

The trip to Honduras was uneventful. No bags, or people, were left behind. Our cook of 10 years, Maria, died from breast cancer a few months ago. This trip we hired her daughter Reina to cook. Although we have a strong desire to help Maria’s family, we were worried about hiring someone to cook whom we did not know. Doug had visions of the entire group coming down with diarrhea and not being able to function for the trip. These fears were not realized and we ate well. Reina definitely does not have Maria’s skill and breadth of cooking knowledge, but we all stayed relatively healthy. Water was a bit tight, but we could all bathe at least once a day with 2-4 gallons of water.

Education & Schools

Scholarships

The scholarship process took up a decent amount of our time and energy during our trip to Honduras. At the first large community meeting, the vast majority of the attendees were parents who had come from the five surrounding communities for more information regarding scholarships for their children.

Clearly, the community views education as being highly important and given the poverty in the area, the scholarships are a lifeline for those fortunate enough to receive them. The scholarship process contained two main components. The first was to ensure that those who had been receiving scholarships in the past could continue to do so. The second was to enroll new scholarship applicants entering both 7th and 10th grades. Each component required us to collect a lot of information. The students who were reapplying for scholarships had to submit a large packet of documents containing attendance records, homework hours, volunteer service hours signed off by one of the community elders, a budget sheet, a thank



Scholarship day is extremely busy. For poor families there is no other option to continue school beyond 6th grade.

you letter to their sponsor back in Rochester, a personal photograph and of course, their report cards. Thank God for spread sheets because without the organization they provided, it would have been a nightmare. The new scholarship applicants had to submit a questionnaire that evaluated the students' family's financial need, a short quiz that evaluated the student's writing ability, a personal photograph, and of course, their report cards. We were able to complete the vast majority of both components over the course of one day that went swimmingly due to the help of all the team (attendings, residents, translators). It was lovely to see the smiling faces of the children as they came to submit their required documents. It was particularly rewarding to see so many of the children put so much effort and thought into their thank you letters and a few students even submitted additional gifts. It was clear how much they appreciated their education and how firmly they intended to do what was necessary to ensure a brighter future for themselves. The new applicant students were younger and clearly excited at the prospect of continuing their education. It was cute to see how hard they were trying on their quiz, mouthing out their answers before writing them down, erasing constantly, looking to their friends and us for encouragement. Overall, the scholarship process required a great deal of organization, flexibility, and manpower but as a team we got the job done as well as possible.



Students and their non-violence sock puppets

School Visit

We participated in a total of three school visits during our time in Honduras. We visited schools in Portillon, San Jose Centro, and Potrerros. The hikes to both Portillon and Potrerros were magnificent. At each school visit, we brought along the educational curriculum created by the Unitarian Church in Rochester, which centered around a story that promoted non violence and the value of peace and kindness in achieving one's goals. To tell the story, we had the help of sock puppets that were so generously created and donated by members of the Unitarian Church. One of our group members would read the story out loud in English, which was then relayed to the class in Spanish. Meanwhile, a couple of actors would portray the scene with their respective sock puppet. The children seemed to really enjoy the story and many smiled and laughed during the reciting of it. After the story was finished, a couple of questions were asked to the class, and a few brave souls ventured some answers, but it was usually extremely quiet. We then broke out the supplies we had trudged along to allow the children to create their own sock puppets. Some of their work was wonderfully creative and it was fun to help them out. The children were especially pleased when they were informed they could keep their sock puppets. After the educational curriculum was complete, we applied fluoride varnish to over 100 children in Portillon and around 65 children in Potrerros. The dental health of these children is in a word, shocking. In the little time we had with them, we attempted to reiterate the importance of having a toothbrush and brushing regularly. Although we are not optimistic that these words will come to fruition, we still felt fortunate to at least do what we could for



Paulet and Doug trying to engage students about computers

them. Overall, the school visits were one of the most enjoyable parts of our time in Honduras. It was fun and extremely rewarding.

Computer Class

The Unitarian Church of Rochester has helped the school system in Portillon build a middle school. From other agencies the Portillon middle school has obtained 2 computers and even satellite internet access. We met with 8th graders anticipating teaching some basic computer programming skills. It became very clear that they do not know much at all about using computers and are not yet ready to learn to code. On future trips we hope to assist them in learning how to use common computer programs and how to access the internet using a browser. Maybe then we can help educate these students in preparation for joining the 21st century. It always amazes us that a significant proportion of Portillon/San Jose inhabitants do not have access to water in their homes, but they have access to computers and the internet. Now we just need to help them take advantage of the huge reserve of knowledge they have right in their schools.

Microfinance

On the morning of 10/31, Caroline Donohue and I held a meeting to discuss the future of the microfinance program. Nine community members arrived for the meeting. Notably, the group was composed almost exclusively of women with only one man present. They represented 3 separate communities in the area: San Jose Centro, Guanacaste, and Potrerros. We began by explaining that given problems with lack of repayment in the past, we would not be giving out loans during this trip. We explained that we would either be restructuring the program, or discontinuing it altogether if it turned out that it is not salvageable. Most of the community members in attendance were former loan recipients themselves. They expressed disappointment at not being able to get loans this time, as they had paid back their loans. At one point, they proposed the idea that only the community members who came to the meeting should be able to receive loans. We explained that our goal is to help a much larger portion of the community, and that we would need to give loans to many more people than just those assembled for the program to be successful. Another difficulty that was discussed was how to put pressure on people to pay back their loans. It was suggested by community members that we involve the police or a judge, but we explained that we did not have the authority to do so. Community members also mentioned that they feel people often have enough money at some point during the year to pay back their loan, but spend it in a short-sighted manner due to the fact that they know our brigade is not coming back for awhile. To remedy this, we decided on one major potential change to the program—to appoint a “loan officer” for each community who could collect payments from loan recipients throughout the year. At the meeting, we appointed loan officers for each of the 3 communities represented: Justiniano for San Jose Centro, Ma Cecilia



Patrick and Caroline running micro-finance focus group

Justiniano for San Jose Centro, Ma Cecilia



Jacob performing ear lavage

for Potreros, and Dona Bernarda for Guanacaste. We arranged a time for the 3 loan officers to come back in a few days to come back and get the names of recipients from their communities who had not paid so that they could then go and try to encourage them to repay their loans. We made it clear that we still do not know whether the program will continue, and that the earliest we would begin to offer new loans again is during the next brigade in the spring of 2019. Patrick Kelley

Medical care

The clinic was steady-busy. Most of the visits were for viral URIs, body pains, arthritic joints, and epigastric stomach pains. As a few people in the area become more prosperous they eat more Western food and do less manual labor. The result is they get overweight and then develop diabetes and high blood pressure. Although the vast majority of inhabitants in San Jose remain very poor and undernourished, a few patients we saw now have diabetes directly related to dietary and activity changes. We brought this up to area residents a few years ago but they just laughed. As has happened in every other developing country as their economic outlook improves, so too in San Jose we are seeing a transition from diseases related to infections and inadequate food and water, to diseases of excess.



Patrick preparing to inject valium into disabled man with intractable seizures

Some notable cases

Young man with seizures

We were eating lunch one day when a woman showed up with her son stating that he had been seizing every few minutes for the last few hours. We went to see the patient who appeared to be having partial complex seizures and was having trouble sitting up or holding his head up on his own. His mother told us that her son is 21 years old and has special needs with a learning disability and epilepsy. He did not have his usual seizure medications because the clinic in San Marcos had run out and were in the process of ordering more. We gave him an intramuscular injection of Valium and his seizures began to spread out. We had phenobarbital in the clinic which was one of the young man's usual seizure medications. We were able to provide them with a two month supply of this medication. By the time they left us to head back up the Rancho where they live, the patient appeared tired but was stable and no longer seizing. *Caroline Donohue*

Deadly attack

One day when we were about to start afternoon clinic, a man came running up to us saying that a woman was badly injured by a machete in the street and was near death. Patrick, Nate, and Caroline went running with the man down the mountain road to the woman. When we came upon the woman, she was lying on the ground, breathing heavily, and grunting. She had deep lacerations to her face, back of her head, arms, and hands, with some fingers missing. We sent for help. We applied bandages and tourniquets and elevated her feet. We learned that the man that had led us to her was actually her son. A few others from our group shortly arrived in a pickup truck. Keeping her neck stable, we transferred her into the back of the



Trying to save a life from the back of a pick up truck

truck. Thankfully, the truck had just arrived here that day in the village, driven by the husband of one of our interpreters. Otherwise, we would have had no means of transportation. We stopped by the clinic briefly to get IV supplies and saline. We headed off to Esperanza (a 45 minute drive) with the 3 of us and the patient's son in the back of the truck. Unfortunately, we were not able to start an IV en-route despite multiple attempts. On arrival to the hospital, the patient was breathing and still had a pulse. She was intubated and chest compressions were started soon after, but a pulse was recovered shortly after. She was given blood and IV fluids. We left her in the care of the physicians at the hospital, and shortly after returning home to San Jose learned that she had passed away. Some of the local people had told us that this was the worst trauma that they had seen in their area. There were various stories and speculation of what had happened, but it seems that the person who attacked her might have been her husband who she had recently left. We spoke to the police in the area but are not aware if the attacker was found or if any legal action was taken. *Caroline Donohue, Patrick Kelley, and Nathan Holterman*

Home Visits

Grief

The day following the tragic killing of the young woman near San Jose, we received word in morning clinic that her mother was having a very difficult time coping with the sudden and violent death of her daughter. Together with our interpreter, Melissa, two teachers from San Jose's school, and Manuel, we hiked to her residence where much of the surrounding community was congregated to show their support. On the way, we stopped where the woman had been found on the road. The area had been brushed over, but a few bloodied stones remained, as well as scattered clippings of hair; small yet chilling remnants of the violence that had occurred there. The house was about a 45-60 minute hike from clinic. By the time we arrived at least 20-30 people were gathered, both friends and family. A son led us into the room in which the mother lay, wailing uncontrollably with grief. Melissa and I sat with her for a few minutes and expressed our condolences on behalf of the brigade. We provided her with a small supply of valium. I tried to be honest with her in saying that no pill would take away her pain, but this at least may help her sleep. Thereafter, a group of men came into the room and read passages from the bible for the remainder of our visit. Another pair of women arrived with flowers. Others stood silently and prayed. Before leaving we talked with an aunt of the deceased who said that the body would be arriving likely later this evening after an autopsy was completed in Tegucigalpa. Similar to American customs, she said that delivering food to the family would be the most appreciated gesture in the coming days to help. A few days later, the mother came to clinic to be seen. While still understandably distraught she was doing better and thanked us for our efforts in trying to save her daughter. – *Jake Castiglia*

Girl with developmental delay

After doing the aforementioned puppet show and fluoride at Portillion school, we hiked 15-20 minutes further into the town to do a home visit on a young girl with developmental disabilities. The hike was absolutely beautiful, surrounded by lush greenery that included coffee and banana trees. We eventually came to a clearing with a hill of green bean plants to our right and the home to our left. The family was as welcoming as always; our group has some continuity with this patient and her family as we have done prior home visits. The



Nate and Iza doing home visit for disabled girl

patient is a 7 year old girl who has cerebral palsy. Our last visit to see her was 1 year ago. At that time, she had a stage 1 pressure ulcer (an area of redness) on her hip. This time, her skin looked entirely clear and aside from being chronically malnourished due to her illness, she generally looked well. One thing that stood out to me was her very low weight and small size that I might expect of a healthy 3 year old. If this patient had grown up in the United States, she almost certainly would have had a feeding tube placed as an infant, especially given that she has a hard time sucking and is at risk for aspiration. Given her malnutrition, she is at risk for vitamin deficiencies, osteoporosis, etc – but this still made me wonder whether all the decisions we make in developed medicine are necessary. Another thing that stood out to me was how well cared for this patient was despite her family’s low resource environment – a perfect example of how far love and caring can take someone. While at the home visit, we also applied fluoride varnish to the patient’s and 3 other children’s teeth. As we were leaving, one of the interpreters asked the family if she could purchase some green beans from them. They happily agreed and went out to pick the beans on the steep hill, bringing back 1 large grocery bag full in 5 minutes time... and were they ever delicious in our lunch the following day! *Iza Subczynska*



Caroline doing home visit

Guanacaste girl with seizures, and more

One day a man came to clinic in the morning explaining that his daughter has a history of seizures and that they had been given medication in the past to use for injections if needed for her seizures. [Ed: we have followed this girl for a number of years and did initial training on the proper use of injectable diazepam.] He had a paper with him with instructions written out in Spanish of how to give this medication, but it was from a few years ago. We visited this house and saw the young girl who had a febrile viral illness recently but had not had any seizures. We weighed her and updated the diazepam dose to give for breakthrough seizures. While at this home visit an elderly woman at the house nearby started asking us about her back pain. They also mentioned another elderly woman nearby that was sick and having difficulty breathing. We decided to return the next day. We brought Tylenol for the woman with back pain and did injection teaching with the young girl’s father. We had him draw up the right amount of water into the syringe and inject it into an orange. We then also visited the other elderly woman. She had a cough, weight loss, and shortness of breath for about a year. We brought her inhalers and showed her how to use them. She had no contact with anyone who had tuberculosis, but we suggested that she go to San Marcos for TB testing to rule it out. *Caroline Donohue*

Dental Program

There was no dentist on this trip so most of the dental interventions involves applying fluoride varnish to children’s teeth during school visits and occasionally in



Caroline teaching dad of girl with seizures how to inject Valium when seizure will not stop

clinic. We also did dental education and distributed tooth brushes. Most people in the area cannot afford a toothbrush.

Alcoholism

Alcoholism is a huge problem in the San Jose area. So many of the men get drunk every weekend to the point where they cannot walk. On a Saturday morning as we hike the roads and trails we see passed out drunks sleeping it off in the ditches. We have done surveys previously, but now we are entering an action phase. The teacher from Portillon, Ronnie, has a contact in the large town of Esperanza. We are approaching him to start an Alcoholics Anonymous chapter in the San Jose area. Even helping one person may be worth the time, effort, and money, but we hope we can help many more. Alcoholism worsens poverty, the health of the family, and often leads to domestic violence.



Nate applying fluoride varnish to a cooperative student

Cookstoves

In the past 6 months, 4 more cook stoves were built. We built 16 more planchas (large metal plate that is the cooking surface) this trip to be used over the next 6 months. On a prior trip people suggested they wanted planchas that were of thicker metal, even if they were a bit smaller. Now people are suggesting they prefer the larger plancha. A year ago we built a new plancha design that incorporated a large circular hole in the metal plate. We gave the redesigned plancha to an area welder a year ago and finally got it back this trip. Now begins the testing on this new design to see if it meets the needs of the people and holds up to the high heats existing in the stove. Unfortunately, the new design almost doubles the cost of the plancha.

Agriculture

Heirloom seeds

The most sought after seed of the 15,000+ seeds we brought to Honduras is for a scorpion hot pepper. This is currently ranked as the 3rd hottest pepper in the world. Six months ago we gave a few seeds to 6 different people. Only one farmer (Angel Flores) was able to grow the seeds. When we left Honduras, the peppers were about 1 inch in size. If the pepper is not destroyed by bugs, we hope to harvest hundreds of seeds from the plants Angel has successfully grown. He also grew heirloom tomatoes, cucumbers, and cabbage. If the Hondurans like the produce we will distribute the seeds to as many people as possible.

Coffee Farming Cooperative

This trip we met with some coffee farmers and discussed the idea of helping them possibly get a better price for their coffee. Given they make about \$1 US for 16 ounces of coffee and they do the vast majority of work in producing coffee, we are exploring options to make more of the profits reach their pockets. We brought back 25 pounds of coffee from two farms and hope to work with a local roaster to see if people like the coffee. We will make pamphlets that describe each farmer and what goes into making coffee. The hope is that people may pay a bit more when they realize the person highlighted in the pamphlet will benefit directly from their purchase. Unfortunately coffee was just starting to be harvested when we returned to the US so we may not have the best example of just how high quality Honduran coffee can be.



Farmer Angel Flores with coffee ripening



Depulping coffee "cherries"



Coffee beans drying in the sun after pulp and "parchment" removed

Solar food dryer

Given we have multiple grocery stores in Rochester, we can get high quality fruit year round. For the San Jose people, they only get fruit when in season. That means they may get mangoes for a month, and pineapple and bananas for a couple months, but the rest of the year these are not available. This trip we experimented more with the solar dryer. Papaya drying went well. We are now seeing how long dried fruit can last.

Water Projects

Ceramic Filters

12 more filters were distributed over the past 6 months. So far, we have been unable to find filters locally at a lower cost.

Latrines

Two more latrines were built over the past 6 months. We purchased more supplies in Esperanza to continue the construction of latrines over the next 6 months. During the rainy season holes being dug for latrines will sometimes collapse so people prefer to dig latrine holes when the ground is dryer.

Pilas

Pilas are the kitchen sink/counter top/washing machine of the Honduran kitchen. Six pilas were built over the past 6 months. We met with interested families during this trip and anticipate 9 more pilas will be built by May. We ensured the materials were available in San Jose prior to our departure. 6 of the 9 pilas were already being started before we left. We also built a couple more gutters from low cost 4 inch PVC pipe. Pila owners often fill it with rainwater and therefore need a gutter system.



Papaya and bananas in the Solar food dryer

el Salitre

This community has partnered with us fairly recently. Over the past year they have not been as engaged as we had hoped. We visited el Salitre and met with the new mayor of the town. He is younger and seems motivated to help organize the poor people in Salitre. We have a list of people who want cook stoves, latrines, and filters. If all goes well over the next 6 months, we hope to expand to other projects. Whenever we partner with a new community we go slowly to ensure we can trust each other and work together for the benefit of all, and not just the benefit of a few.

Update on Project Status (updated 11/13/18)

Project	Completed	Project	Completed
Cookstoves	332	Scholarships	100+ students, 36 current scholars
Filters	364	Micro-loans	196 loans, \$10,658
Latrines	147	Fish farms	6
Pilas	98	Piped water systems	5 communities
Heirloom seeds	>15,000 given		

Your Help is Needed

We believe in low cost, simple technology solutions that the Hondurans can learn and maintain on their own. We are doing a great job in this respect. However, even simple interventions cost money. To continue the exceptional work we are doing in Honduras, we need more funds. If you have the financial ability and appreciate the great improvements our activities are bringing to rural Hondurans, please take a minute and donate to our project. Donations are tax deductible if you itemize your taxes. We are very fortunate to have the assistance of the Department of Family Medicine and dedicated volunteers to almost eliminate overhead expenses. Therefore, your donation will reach the Hondurans and not be spent on less helpful expenses such as rent for a dedicated US office or US-based secretarial support. If you would like to donate to the San Jose project, please make a check payable to “ HH Foundation – GH Fund HFM”. Mail the check to “ Highland Family Medicine 777 Clinton Ave, South Rochester, NY 14620 Attn: Douglas Stockman”.

Summary

The greater Rochester Family Medicine community has touched so many lives in Honduras and the Hondurans have enriched so many of our lives. As is true for all development projects, there will be setbacks. These are learning opportunities and allow us to improve future interventions. This cross-cultural project is realizing huge benefits for everyone involved, even with a few setbacks. The scholarship students gain confidence as well as a chance at a path out of poverty. Seeing the smiles and appreciation as people display their running water, new cook-stove, or water filter is so rewarding. Through these very intimate person-to-person exchanges we maintain hope that a better world will become a reality one community at a time. Thanks to everyone for their continued support to make this project such a great success.

Douglas Stockman, MD
Director, Global and Refugee Health

Barbara Gawinski, PhD
Associate Director, Global and Refugee Health

Thanks to other trip members who wrote much of this report.



*Front Row: Diego, Sophina, Melissa, Paulet
Back Row: Doug, Iza, Jacob, Patrick, Caroline, Nate, Heidi*



Yes, this is someone's house. Poverty is still pervasive in San Jose



There is no flat ground in San Jose. Everyone must work very hard carrying heavy loads on their backs up and down mountains



Iza having fun with some children



It is the children of San Jose who will reap the rewards of our collaboration with this community. How could you not want this child to have a better life?