

## Honduras Trip Report – Oct-Nov 2017

Department of Family Medicine, University of Rochester

<b>Participants</b>	
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### 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 Oct-Nov 2017 trip.

### Travel and General Comments

There were no problems with lost luggage this trip. There was a large cool front over Honduras when we arrived. We caught the last two days of five days of heavy rain. Everyone was soaked as we unloaded in San Jose. But after that, we had no rain and enjoyed beautiful blue skies. Unfortunately, the water tank used to hold rain water that we use to make safe drinking water had a leaking pipe, so when we went to make drinking water, there was no water. We then had to scramble to figure out other ways to get safe drinking water (which we did). The group remained very healthy while enjoying the great cooking of Maria. Once we left the area and we were eating at restaurants, a number of travelers developed diarrhea.

### Education & Schools

#### A school visit to Guanacaste

Starting out immediately after breakfast to avoid midday heat, we (Carol, Julie, Sophina & interpreter Alex) descended steeply on a slippery footpath to a stream crossing, then continued up to the Guanacaste "road." There we met a pleasant man who agreed to participate in a brief survey about alcoholism. Continuing uphill we were nearly at the school when we passed some women washing clothes in a stream. A teenager carried a container of water up towards the school.



Carol & Rashida teaching class



Finished home "Maps"



Sophina teaching Sex Education

The school consists of 2 small enclosed buildings (holding a total of 3 classrooms) and an open-air classroom arranged alongside a rocky dirt playground, with a latrine on the other side. Receiving permission from the principal, we split into two groups: Sophina talked to the 6th grade girls about puberty and sexual issues while the other 3 worked with the 5th graders on a project about maps leading up to each student drawing a map of his or her own personal world. This is a project planned by the First Unitarian Church's Honduras Task Force and the church's religious education staffperson. Kids in the church's religious ed classes and Honduran kids do the same project and then exchange, learning about each other in the process. The Honduran students wearing uniforms of white shirts and blue skirts or pants listened attentively and then excitedly drew using markers (a novelty) we carried there in backpacks along with other school supplies.

Schools in San Jose Centro and Portillon were visited with the same project. Portillon lies near the mountain valley far below our home base and is reached by a road so steep and rough that some of the teachers who live in the larger community of Rancho commute using ATVs. Thus it was amazing for me to get a tour of the spacious 7th through 9th grade classrooms with large windows and whiteboards built since my last visit a year ago. As we went from room to room, articulate students rose to greet us and thank us for financial support given through the church over the years. (While the local community bought the land and the government built the classrooms, the church has helped substantially with other building projects and supplies.)

### **Scholarships**

It's difficult for students to continue studying past the 6th grade because there is no high school close by, and expenses are higher than for grade school. Scholarships for additional expenses are coordinated by the Unitarian Church. This year we have 29 students in the 7th through 12th grades and 1 in university. Two young women who graduated from high school this year and were former scholars; both asked for support in going on for advanced education. Maria Justa, graduating from a high school in the capital city of Tegucigalpa said, "I come from a poor family but with your support and encouragement you have helped me realize my dream." She hopes to become a nurse and return to help with future Rochester brigades. Unfortunately, her younger sister dropped out of school after being bullied, and now has a baby at age 17 - a fate typical for Honduran girls, often at a younger age.

On a sad note, we had to drop one of our scholarship students. His father had taken a large microfinance loan out in 2013 and had not made any payments since then. When families default on their loans, they are not eligible for scholarships, so when the situation was discovered, we had to notify the father that the scholarship would not be continued. The student thinks that with the uniforms and supplies he already has he will be able to continue his studies, as his grades are excellent.

More agreeably, 16-year-old Wilmer came by to drop off his scholarship paperwork and chat. He reports he has the highest average in the entire junior/senior high school and has received a number of awards.

Thirty-five applications were accepted for new scholarships for the February to November 2018 school year. Many of our current scholarship students reported that over the Honduran summer break they would be going to pick coffee with their parents. *Carol Thiel*



*Current Scholars*

## **Health and Sex Education with Middle Schoolers**

*Puberty and Sex Education Chat (Guanacaste) 10/30/17*

During a visit to the Guanacaste school, I met with seven 6<sup>th</sup> grade young women, ages 12 and 13 years. They explained to me that they had just had a talk on puberty and sex by a representative from the “Vida Mejor” (Better Life) project the week prior. The presenter spent an hour with the girls and an hour with the boys separately speaking about the body changes of puberty and the need to care for themselves to protect against an unplanned pregnancy and STIs. I spent time reviewing with the girls what they had learned the week prior and quizzing them on certain aspects of puberty, contraceptive options and STIs. Having just learned this, they were quite accurate in their answers. Given time to write down questions privately, they asked what sex was exactly, what contraceptive would be best and, more than half of the girls, asked what they should do if they found out they were pregnant. We had an open discussion about each of these questions. I asked about what trends they saw in their community. They said they knew of girls who got pregnant right after finishing 6<sup>th</sup> grade and had no way to care for their baby. They all understood and could verbalize reasons for waiting and trying to prevent an unplanned pregnancy. One particular girl, gave great answers and asked other excellent questions. She asked more details about the scholarship program to continue her education in San Marcos (7<sup>th</sup> grade through high school). When the conversation slowed down, one girl felt brave enough to ask me about my personal experience: How old were you when you had your first boyfriend? When did you have your first child? How old are you now? How were you able to wait so long to get pregnant (what birth control did you use) and why? I truthfully answered and explained more about my experience and the education and family goals that I had growing up. They appeared very interested to hear a different perspective and when I heard one girl say, “Yo quiero hacer eso también” (I want to do that for me too), I hoped I could be one story they could remember and that they could find other great role models in their lives to help them be the difference they were hoping to be. *Sophina*

## **Microfinance**

The microfinance program began in May 2008 as a joint venture between Highland Family Medicine residency program and the First Unitarian Church of Rochester. The aim of the program is to improve the economic well being of the Hondurans residing in and around the village of San Jose. The program allows families to start small businesses by making small loans available at very low interest.

The loan money for the current brigade comes from a combination of money repaid by the community as well as some money which was left over from the prior brigade. As done during past trips, we collected paybacks on outstanding loans throughout the trip. This year was unique in that very few people paid back their loans. After much deliberation we decided to cancel this trip's loan program; not enough people paid back their loans and there were not adequate funds to distribute new loans. The decision was made to cancel the loan program for this trip, hoping that we would have the funds to continue the loan program for the May 2018 brigade. Furthermore, it appears that this has been a worsening issue, with increasing numbers of



*Rashida and Alex receiving loan repayment*

people that have 'defaulted' on their loans, which means they have failed to pay back any of their loans over multiple cycles.

Typically, in order for an applicant to qualify for a loan, applicants need to attend microfinance teaching sessions. All new applicants are required to attend one full day of teaching, which were split into both morning and afternoon sessions. Returning applicants are only required to attend one session. We prepared for a full teaching day with lesson plans and skits, but canceled when we did not have enough participants show up – in addition to having inadequate funds for the loan program.

### **One interview with a loan defaulter**

We spent much time educating the communities and individuals about the importance of paying back loans. However, we felt it was also necessary to make some personal home visits to better assess barriers to paying back loans.

One such example is the case of a young mother of 9 who we will call Maria. Maria was a new loan applicant in May 2017 and received a loan of 500 L for her business (\$22 US). Her business plan was to continue selling coffee at the market in Rancho, but use the loan to expand to selling tamales as well. She did not pay back this brigade – her total owed, including the small 2% interest came to 510 L. We hiked to her town of Guanacaste, about 45 minutes from the volunteer house in San Jose. A young girl in the community graciously led us to Maria's home, which was another rigorous 60 minute hike up and down a mountain from the center of Gaunacaste. The hike was challenging for us, and we were not carrying tamales and coffee as Maria would have been.

When we arrived at Maria's house, we were first greeted by a handful of dogs. Her home was significantly more modest than the homes in the center of Guanacaste; the home had adobe clay walls and a tin roof. Her children were next to greet us. The children were barefoot and dressed in tattered clothes with multiple holes. Maria was not home at this time, but her oldest available child was able to answer some questions for us. This is a young girl in 5<sup>th</sup> grade, who we will call Francisca. The following outlines our conversation with Francisca.

Where is your mother?

I'm not sure. She may be at the market in Rancho.

What is your mother selling now?

She sells coffee. [Coffee beans drying on rooftop are visible]

Is she making and selling tamales also? [This is what the 500 L loan was for]

No. She is not doing that anymore. The corn yield was poor. Meat is too expensive.

How does she transport the coffee to the market?

She carries it on her back.

Is there any other source of income in the home?

Yes, my father. He cuts firewood and delivers to homes.

Do you have a refrigerator, television, beds and mattresses?  
We do not have a fridge or TV. We have beds without mattresses.

Although Maria seemed to be working hard, her new business idea was unsuccessful and she was likely not able to pay back the loan due to poor crop yield (not enough corn to make tamales) as well as inaccurate assessment of the market (meat was too expensive for her to purchase for tamales). While we considered suggesting the option of making meatless tamales, even if the corn yield was good these would not have been able to compete with meat filled tamales abundant at the market. Perhaps she could have considered selling for a lower price if vegetarian, but there is also no guarantee these would have sold. Because Maria was not present, we were unable to get a better idea of how much income she brought in from selling coffee alone. We would have liked to discuss the importance of paying the interest at least (only 10 L) so that she would not remain in as much debt. Although we did not receive payment on this loan, we considered this visit a success since we were able to better understand barriers to paying back loans.

*Sonya and Shivani*

This unusual event of people not paying back loans is a reminder that many interventions need guidance and redirection. The canceling of this loan cycle is really a wake up call for the community (and for the family medicine residents who run the loan program). Other non-governmental organizations that have worked in the area generally have a very short project cycle – they do one targeted intervention, then leave the area. Our long term commitment to the San Jose community will have ups and downs in the relationship, and our longitudinal interventions will need to be modified. For example, it is possible to get a loan from wealthy people in the area, but interest rates are in the 10% per month range, and collateral is always involved. The end result is many people taking out loans locally lose their land and home to the lender. We of course do not want this, but there has to be some penalty for defaulters. The family medicine residents will need to problem solve this issue to reach a solution that benefits the community (and helps the residents learn a bit more about working cross-culturally). *Doug*

### **Medical care**

The clinic was a bit slower than usual. The common problems remain common: such as viral infections, worms, scabies, pneumonia, UTI, and joint pains from arthritis. A few lacerations were repaired. A number of joints were injected with steroids. A boy pictured below had a severe case of impetigo on his face.



*Shivani caring for a family*



*Sonya educating a patient on medications*



*Boy with impetigo*

Some group members visited the government clinic in San Marcos. They were surprised to find that our initial referral clinic was less well equipped and less capable than our San Jose Clinic. See below for more details.

### **Trip to San Marcos Clinic – Ryan, Sonya, Julie**

During the trip we decided to go to the San Marcos clinic because we wanted to learn more about local resources, especially about what is available when our brigade is not in town.

The San Marcos clinic is about a 1 hour hike from San Jose.

Upon arriving we were able to speak with two RNs and a health care promoter. We met the doctor, Dr. Barrios, as well. They are all employed by the government. Patients are seen on a walk-in basis and no formal appointments are made – it is all outpatient and does not have inpatient capabilities. There are no fees for consultation or medications.

The health care promoter, named Erika, gave us a detailed tour of the small clinic and was able to answer a lot of our questions:

### **What are the clinic hours and who staffs the clinic?**

The clinic is open from 7am -3 PM Monday through Friday. The clinic is staffed by an MD, two RNs, a health care promoter, and a student from the university completing her social work requirement.

### **Who does the clinic serve?**

The clinic serves 22 different villages (about 80-100 sq miles), and serves men, women, and children.

### **What kind of services does the San Marcos clinic offer?**

- Primary care
- Care of chronic diseases (HTN, DM)
- Cervical cancer screening
- Prenatal care
- Vaccinations (including HPV)
- Contraception
- IVs, injections
- Pharmacy

However, the San Marcos clinic cannot draw labs, EKGs, X rays or other imaging, and does not have specialists on staff.

### **What happens if patients need additional or more specialized care?**

Patients are referred to Concepcion or La Esperanza, which are each about 40 min away by car. Transportation can be arranged in the case of an emergency by local police or municipal vehicles heading into the bigger towns, however, most often patients must arrange their own transportation at their expense, which can cost more than a month's wage if a private car is hired.

### **How does the pharmacy run? What types of medications are available?**

The pharmacy is stocked by medications from an NGO called Shoulder to Shoulder, which is financially supported by the Honduran government. Medication availability is dependent on this NGO and often runs low. (During our visit, the pharmacy was poorly stocked and completely out of anti-hypertensives (Image 1)) When stocked, medications include antibiotics, anti-hypertensives, NSAIDs and other

antipyretics, anti-epileptics, albuterol inhalers. If medications are not available at the San Marcos clinic they may need to seek medications at a different pharmacy, possibly as far away at Concepcion or La Esperanza, and the patient must purchase the medicines.

**What family planning and contraceptive services are available?**

The clinic offers a variety of forms including condoms, OCPs, Depo, Implanon and IUDs. The most commonly utilized are Depo, Implanon and condoms. The clinic places about 3 implanons per week. Very few women choose to have an IUD.

**What services are available for prenatal care and obstetrics?**

San Marcos clinic offers monthly prenatal visits, but do not do deliveries on site. Patients must go to La Esperanza or Concepcion. Patients are required by law to deliver in a hospital facility; you are legally not allowed to deliver at home with a midwife. Midwives could and have faced jail time for planned home deliveries. Thus patients must travel to Concepcion or La Esperanza to deliver – they travel 2 weeks prior to their due date and stay at the facility until they deliver. Family members must supply food and clothing for the patient, but 1-2 family members are also allowed to stay with the patient. Children are not allowed to stay at the facility and alternative child care arrangements must be made by the patient herself.

Some notable cases

*Toe Laceration by Julie and Rashida*

It was 5 pm and clinic was closed and we hear “Who’s here? We have a laceration.” Rashida and I went up to the clinic to find a motor taxi parked outside and an 85-year-old female being helped inside by her granddaughter. She had cut the bottom of her right toe on a piece of glass while hauling water to her house. Her grandson who drives the motor taxi brought her down for evaluation and treatment. Her laceration was about 4 cm wide and filled with dirt and debri. Gathering all the necessary supplies is one of the most challenging parts of procedure like this in San Jose. However, using out clinical skills and improvisation, we were able to pull together everything we needed. First we soaked her foot in sterile water. Then we irrigated it using a 10 cc syringe. Next, we anesthetized her with a digit block using 2% lidocaine without epinephrine. Then, we started the sutures. We placed 6 simple interrupted sutures using 4-0 prolene. The patient will need to get the sutures removed in 7-10 days in San Marcos because the brigade will be gone by then. The wound closed very nicely. We wrapped the wound in gauze, antibiotic cream and a band-aid. We gave her 3 days of Keflex antibiotics given how dirty the wound was initially. The patient left the clinic limping, smiling and grateful that we were able to care for her wound. *Julie & Rashida*



*Toe wound after being cleaned*



*Rashida with Julie helping*



*Patient and her daughter*

## **Home Visits**

### *Report of child neglect*

We performed a follow up home visit on a six year old girl with severe cerebral palsy who lives in Portillon. On our previous visit, a man from Portillon had come to the San Jose clinic reporting suspected abuse of this child. She was evaluated on the last trip and some concern remained for neglect. The Portillon teacher, who accompanied us, had no additional reports of concern for abuse in the interim, and also reported that she had been taken to the San Marcos clinic for a check up at least once. Upon our arrival, her mother was away at the cemetery honoring the Day of the Dead, and a neighbor woman was checking in on her intermittently throughout the day. She was happy to bring us to the child's house and have us evaluate her. The child was lying in bed on a foam mattress covered in cloth, naked but covered in blankets. She appeared overall clean with healthy intact skin without obvious bed sores, but emaciated. The women explained that her mother turns her multiple times throughout the day and sometimes brings her outside to the hammock. She explained her feeding routine of three large bottles of government supplied formula fortified with essential nutrients, as well as additional formula when she cries. Although the child appeared to be cared for to the best of her family's ability, this was a very difficult situation to witness, knowing the resources available to care for a child with her condition in the United States. We left bandages, barrier creams, and antibiotic ointment with application instructions, should the child develop pressure ulcers at some point in the future. We also discussed with the neighbor woman good care, hygiene, and methods to avoid aspiration or choking during feeding.

### *Home visit for knee pain*

A man came to the volunteer house one afternoon asking if we could see his daughter who was having a problem with her knee and was unable to walk to the clinic. He led us to their home where we heard the story from the 21 year old patient. She had fallen a couple times, landing on and hurting her left knee, over the past year. The most recent incident was 6 months prior to our visit. She told us that a few weeks ago she spontaneously developed pain, erythema, and swelling in the left knee along with fevers and chills. They had visited the hospital in Esperanza where an x-ray was unrevealing and she was referred to orthopedics at a hospital in Comayagua for further evaluation and treatment. Though it appears she was diagnosed with septic arthritis, she was not treated with antibiotics to our knowledge and was given a few day course of NSAIDs for pain and swelling. The patient's father explained to us that they did not have enough money for transportation to the hospital for the orthopedic evaluation. They were planning to return to Esperanza in hopes of some sort of medical care and answers since they could not afford the appropriate care. On our exam, the woman was warm and perspiring, and had a swollen, hot, red left knee that was very painful on palpation. She was unable to bear weight on the leg. We suspect that she will need joint aspiration and IV antibiotics which we were unable to provide at our clinic. As it turns out, Comayagua was directly along our route back to Tegucigalpa. We were able to give the patient and her brother a ride to their destination and also collect donations to fund their return trip and some of their medical expenses.

## **Dental Program**

We did not have a dentist this trip.

## **Parteras and Health Promoters**

Due to scheduling conflicts, the Partera meeting could not happen this trip. Last trip the traditional midwives were educated on modern neonatal basic life support. As you may remember, the traditional way of resuscitating a struggling newborn was to place a chick near the baby's mouth, hoping the chick's spirit would enter the baby.

## **Alcohol Use Survey**

The team conducted alcohol surveys as part of the on going project started this past May regarding alcohol use in rural Honduras. A total of 13 surveys were obtained on this trip, twelve of whom were men and one women. Almost everyone (except for one individual) shared with us its fairly easy for them to purchase alcohol. Although alcohol is banned in the town of San Jose and its neighboring villages, we saw how readily available it is to purchase, often for a very cheap price. Many of the local vendors and larger businesses bribe government officials allowing them to sell alcohol on public market days. The selling occurs discreetly but the effects are quite visible, often on the side of the road with a drunk unconscious individual next to the bottle. Most of the alcohol is purchased in El Rancho, who often buy large quantities of local beer, and moonshine from the neighboring town called La Esperanza. Below is one story the team obtained while on a hike.

### Alcohol Survey Case

On a hike to Doug's Point, a few of us came across a young man sitting alongside the road. We waved and he waved back. We approached him and explained that we were conducting a small study on alcohol use and asked if he would be willing to complete a survey. He politely agreed. He had actually only ever drunk alcohol once in his life. Initially, a bit surprised, we were wondering if we should proceed with the remainder of the survey. However, he was very willing to share his story; and, it was a story that carried with it a very unique perspective. His first time drinking had been such an awful experience for him that he never drank again. The young gentlemen explained that he was underage at the time, but that he became angry while intoxicated. He also experienced violence from others while intoxicated and ended his night in the hospital as a result. That night had a big impact on him; he regretted that night. He shared that he decided against that kind of life and had become an entrepreneur. In fact, he was waiting for the bus to meet with someone for a new restaurant he just opened. We were happy to speak with him and learn more about his experience. *Rashida Mengi*

## **Cookstoves**

The improved cook stoves we designed remain a very desirable "appliance". This trip we experimented with making our own planchas (metal plate that sits of top of fire and is like a very large griddle). The thicker the metal plate, the longer they last. We made our own of thicker metal at much lower cost than we can buy in the region. In the past 6 months, 11 more cook stoves were built We now have enough materials in San Jose to make over 20 cook stoves in the next 6 months. In an effort to accelerate project completion, we hired a recent high school graduate to spread the word about our program to distant homes and help interested people meet the requirements for projects.

## **Agriculture**

During the last trip, we connected with a farmer living in Rancho who has a very large farm. In addition to owning much land, he is interested in trying new things. He has multiple projects going, some include: growing and selling coffee, starting coffee plants from seeds and then selling the coffee plants, and selling bananas and plantains. We are working with him to grow vegetable crops using heirloom seeds and drip irrigation. He will also start raising chickens, both for eggs and meat. We are educating him on basic book keeping and business practices to help him better manage his farm.



*Coffee plant nursery, 16,000 plants*



*Coffee nearing harvest time*



*Coffee drying in sun before roasting*

## Water Projects

There are no major updates on water and sanitation projects. The government piped water project continues to struggle. Area residents get about 2-3 hours of running water every 7-8 days. We sold a number of ceramic water filters this trip. No new piped water projects were started.

## Update on Project Status

Project	Completed	Project	Completed
Cookstoves	312	Scholarships	100+ students, 30 current scholars
Filters	344	Micro-loans	196 loans, \$10,658
Latrines	138	Fish farms	6
Pilas	92	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. This cross-cultural project is realizing huge benefits for everyone involved. The scholarship students gain confidence as well as a chance at a path out of poverty. The micro-loan program is also helping adults find a way 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.



*Lester, Paulet, Doug, Ryan, Melissa, Caroline, Julie, Sophina, Sonya, Shivani, Carol, Rashida*