Honduras Trip Report – Fall 2019

Department of Family Medicine, University of Rochester

Participants			
Faculty	Residents		
Sophina Calderon	Alisa Liu		
Douglas Stockman	Stephanie Mazzawi		
	Kailyn Rigby		
Interpreters	Alix Snow		
Diego, Heydi, Melissa, Paulet	Zoe Gravitz		
Dental	Unitarian Church		
Roger Carroll	Carol Thiel		

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 Fall 2019 trip.

Travel and General Comments

The trip to Honduras was uneventful. No bags, or people, were left behind. Reina, the cook, could not join the group because she was pregnant and at term. She delivered her baby while we were in Honduras. He friend Vanessa did a great job keeping us well fed. The group stayed remarkably healthy from a GI perspective. For the first half of the trip we had rain, often very heavy, every day so we could bathe every day. Then the rain stopped and we ran out of water 2 days before we left San Jose. After a few hours of problem solving we got some water from an area stream. San Jose has no year round water source or piped water so having plentiful rain water is a treat. The down side of all the rain is the mud and difficulty traveling. During the May trip we often struggle to find enough water to bathe, and that water is often the color or tea, with mosquito larvae in it.

Education & Schools

The First Unitarian Church of Rochester has actively supported education in this area of Honduras for more than ten years. This support takes the shape of scholarships, school visits and occasional funding of special projects.

Scholarships

In the beginning, there was only one junior-senior high school serving a large area including the communities we work with. This school is distant from our communities and scholarships given to the most promising applicants helped cover expenses local families found it difficult or impossible to afford. These expenses might include room and board near the high school, uniforms, shoes and notebooks. Most



Scholars

Honduran students here go to work after the 6th grade, so the scholarship might replace lost wages from a student continuing his or her education rather than going to work. Currently the scholarship aids 35 students from 7th through 12th grade plus another long-time student completing her third year of university. We are immensely proud that in a community where high school graduation is rare, we have four students graduating, the most ever at one time. On collecting 6-month recertification packets, the pride of all the students' parents in their children's achievements was readily palpable.

In recent years the most distant community of Portillon added 7th, 8th and 9th grades to its elementary school so that its students need not leave the community until entering the 10th grade. On the brigade's arrival we were surprised to find another junior high school heavily under construction across the street from our volunteer house in San Jose. Students from both these newer junior high schools still need scholarships to the high school after finishing 9th grade locally. Meanwhile, scholarships remain in high demand with the communities of El Salitre and Rancho de



Carol teaching children how to make friendship bracelets

Quemada asking to be added. However the Honduras committee of the church may need to re-evaluate its program with the proliferation of local junior high schools. (The original junior high in San Marcos is likely to provide a more specialized education than the more local schools.) Pending a decision, more than 30 applications were received for new scholars for the new school year starting in February 2020.

School Visits/Craft Exchange

First Unitarian religious education students K through 5th grade learn a little about the lives of their Honduran counterparts. Every fall students from Rochester share a craft project. This year, Rochester students made and sent friendship bracelets which students in Portillon and San Jose Centro were proud to receive. In turn they made bracelets to be shared in Rochester. In addition, students were delighted with the gift of musical recorders sent by a couple from the church. Few families here own radios or CD or mp3 players, making any form of music welcome.

Special Projects

Occasionally the church is able to supplement school resources with a special donation. After several years of Portillon's request for musical instruments, the church was able to deliver a large donation from a former Family Medicine resident enabling the school to purchase drums, portable xylophones and cymbals. In thanks for this as well as in appreciation for our brigade's representatives having made the effort to visit (a 3-hour round-trip hike up and down the mountain), we were treated to an enthusiastic 90-minute performance of music and dance. Most touching was the school's dedication of its band to its donor, calling it "La Banda Musical Jean Hamlin." As a 9th-grader remarked, "Life here can be difficult so we appreciate beautiful things." Later another celebration was sponsored by the scholarship students and their families featuring traditional and modern dance and games. (The nimble-footed Hondurans won!) Everyone, "gringos" and Hondurans enjoyed dancing and playing together. Once again this was a welcome break from a difficult life.

Carol Thiel – Education report

Medical care

The clinic was quite busy. We saw 133 patients. As is often the case, common things are common. Many viral infections, GERD, and arthritis complaints. A few of the more notable cases are detailed below. Many patients received steroid injections, and a number of regulars got their ear wax removed.

Some notable cases

STI case

A 27 year old woman presented to the clinic with complaint of vaginal discharge. She also reported redness and irritation. Therefore, a speculum exam was performed, and wet mounts were prepared. On exam a thin white discharge was visible and importantly her cervix appeared erythematous and friable. Using the microscope that was brought to Honduras by Dr. Stockman was extremely helpful in this case. With the microscope we were able to examine the wet mounts and found only epithelial cells Therefore

we could reasonably rule out trichomonas and decided the cervicitis was most likely caused by Gonorrhea and/or Chlamydia. As a result we treated her for Gonorrhea and Chlamydia and instructed her that her partner should also come in for treatment. It was more challenging to make this diagnosis than when in the US because we rely more heavily on confirmatory lab testing instead of the microscope and I still wished I had the confirmatory testing to ensure we were accurately treating the infection. In addition we provided counseled the patient regarding birth control because she was not using any form of contraception. She stated that she desired to get pregnant and asked questions regarding a pregnancy she had lost and the instruction she had received from a local clinic.



Kailyn at microscope

Mental Health Care Access in Developing Countries

One morning I saw a 34-year-old woman with back, chest, and abdominal pain. She also endorsed fatigue and weight loss. After extensive questioning and a benign physical exam that revealed no red flags, she suddenly appeared tearful. She revealed that she had been feeling depressed and anxious since

her father passed away 2 months ago. She had been living with her father, and after his death her brothers kicked her and her children out of the house. She felt overwhelmed and didn't know how to take care of her children. In addition, people had been teasing her for how skinny she was, and her children were embarrassed by her because she was "sad all the time." The only reason she hadn't tried to harm herself was because she did not want to make her children feel the way she did when her brother committed suicide.

The people of San Jose have little access to mental health resources. There are no nearby therapists, and in fact there is only one psychiatric hospital in the entire country of Honduras. We gave our patient a two month supply of fluoxetine and instructed her to go to San Marcos for follow-up and refills. After this experience, I reflected on how individuals in the United States and Honduras face barriers to behavioral health resources such as cost, distance



Stephanie expertly performing a knee injection

from the nearest provider, stigma, and provider discomfort. We need to do more to improve mental health care both domestically and abroad. *Alisa Liu*

Eye complaint

A 64 year old farmer came to the clinic on Tuesday stating that upon waking on Sunday he had a "white spot" over his right pupil, and his eye was red and painful. He denied any trauma to the eye, and states nothing unusual happened prior to the eye pain. He denied consistent vision changes. The day before he had been harvesting corn which is a normal part of his daily life. His eye was very red and inflamed, and a white patch was overlying the inferior border of the pupil. Without access to fluorescein stain it was

difficult to assess for abrasions. But as thorough a physical exam as possible made some of the more dangerous concerns such as orbital cellulitis less likely. We rely so much on our ability to definitively rule in and out diagnoses on our differential with testing, especially potentially serious ones. In many ways even though I knew it was unlikely, it was difficult not to have that reassurance. Cultural differences also complicated the presentation. Speaking with the patient further made it clear that his concept of time was not as



Corneal sore in elderly man, pre & post treatment

rigid as ours. While he had initially said his eye complaint started on two days prior to presentation it became apparent that it had started many days before that. The concept of exactly when things occurred, their temporal relation to each other, and the importance of the timing of symptoms was just not an idea that was shared by our patient. In fact he had been seen at the clinic in San Marcos an unidentifiable number of days ago, but they were unable to provide any care other than suggesting he see an ophthalmologist, which he could not do. Thankfully we were able to provide

chloramphenicol/dexamethasone eye drops and the patient was able to return to the clinic two days later, and had quite an improvement in redness and pain. He had a decrease in opacity of the white spot in his eye. We can only be hopeful that it continues to improve. It is unclear if his eye will get completely better. What is clear is that without our clinic he would have not received any treatment at all. *Alix Snow*

San Marcos Clinic

Meeting with Dr. Luis Alberto in the clinic at San Marcos

Carol, Paulette and I spent a few minutes speaking with Dr. Luis Alberto, one of the physicians seeing patients at the central clinic in this area. He stated that the clinic currently lacks several critical medications and supplies including oral prednisone, penicillin, azithromycin, cephalexin, and blood glucose testing strips. He reports that the only hypertension medication currently available to the community is enalapril and the only lab tests are POCT urinalysis and pregnancy tests.

In regards to cervical cancer screening, cytology is collected at the clinic in San Marcos and sent to San Pedro Sula for analysis. Patients with certain findings are sent to La Esparanza for colposcopy. They initiated HPV vaccine for 11 year old girls five years ago.

In terms of what is available in La Esparanza (1 hour away) in terms of testing, Dr. Alberto states that "all tests" are available there, although some must be paid for out of pocket. They also have xray and

ultrasound. For CT or MRI patients must travel to Comayagua (3 hours away) or Siguatepeque (2 hours away). Zoe Gravitz

Editor comments: We often have medications left during the end of the trip that will expire before we return to San Jose. The group had a discussion about whether to donate these meds to San Marcos for their use. Doug has often been hesitant because when we obtain free or low cost meds we must guarantee the meds will not be diverted for personal gain. The group discussion did not result in a great answer. However, the next day in clinic brought some clarity. A patient from San Marcos reported they believed clinic meds, and meds donated by other brigades were being diverted for personal gain. When the patient was seen in San Marcos they were told there were no meds, but that they could purchase the needed meds from a

man's home nearby. The patient reported the meds seemed to be the same that had been available before in the clinic and from a recent brigade. Given this report, we decided to donate meds to a US-run, faith-based group working in a dump in the capital Tegucigalpa.

Dental Program

Roger Carroll, a dentist from the Rochester area joined our group for the first time this trip. He single handedly saw more patients than the rest of the brigade saw medical patients. He worked tirelessly and helped so many people who do not have access to dental care. Imagine having a broken tooth or partially rotted tooth with terrible pain and having no access to dental care. Patients came from all over the area and waited hours to be seen. Most dental patients needed damaged/rotted teeth extracted, but Dr.

Carroll was able to save some teeth with restorative work. See the photo demonstrating the repair of a chipped front tooth, before and



Roger teaching Kailyn the finer points of dental procedures

after to view what is possible without the proper tools/equipment, but with skilled hands.

Fluoride Varnish Program

It is very difficult to see children suffering with rotted painful teeth. Almost every morning, a few of us

went on hikes to the schools in the surrounding villages to apply fluoride varnish to the students' teeth. We ended up visiting the schools in Guanacastes, Portillon, Potreros, El Horno, El Salitre, and San Jose Centro. Each hike held a different physical challenge, and we were guided by one of the wonderful interpreters each time. Once we got to the schools, we would provide some education about oral hygiene to the children, usually in the form of an interactive hand-puppet show, which the kids loved and actively participated in. We then had them line up for a fluoride varnish treatment and gave them a toothbrush and toothpaste to use at home. The students were so cooperative and were so appreciative that we were there. At the school in Portillon, they even prepared a show for us that included singing and traditional Honduran dancing. It was such a privilege to watch them express their gratitude for our program. We did notice there was some disparity in the condition of the teeth in the younger



Chipped tooth, pre and post repair

versus the older students. Most of the younger children had several rotting teeth and caries, while the teeth of the older children were usually in much better condition. We thought a possible etiology might be that since the younger kids would be getting permanent teeth, parents might be more lenient about how often they were brushing them. We also thought they might not have access to the basic supplies to maintain their oral hygiene. A third possibility is that the older children have been getting fluoride treatments every six months for the past 2-3 years. We did stress the importance of brushing their teeth twice a day, no matter how old they were. Hopefully by doing so, we were able to make a lasting impact on their lives and the health of their teeth.

Stephanie Mazzawi



Presentation with puppets on the need for dental care



Kailyn, Stephanie, and Melissa applying varnish



Alisa and Alix applying varnish

Clothing

We brought a couple pieces of hand made children's clothes from the US to see if the children of San Jose might wear what Good Samaritans from the US donated. The dress and shorts we brought were a huge success. We hope to bring more donated clothes in May, if luggage allows. Thanks to Lauren DeCaporole and her connections in "Dress a girl with love". The girl pictured to the right was so happy to get this dress. She was seen wearing it repeatedly.

Alcoholism

Alcoholism remains a huge problem in this area. We continue to explore interventions. We were supposed to meet with a man who runs AA meetings in the state capital, but he was unable to visit our area while we were there. During our community meeting, women brought up the problems alcohol causes. We offered our support and made some suggestions. Hopefully the community will find its power to combat this terrible affliction that destroys families and lives. We are willing to help but need the community to decide it is time to take a stand.



Donated dress

Cookstoves

A number of cook stove projects were lined up to occur over the next 6 months. We cut another 16 planchas (stove tops) so at least 16 more stoves can be built over the next 6 months.

Filters

We gave out 11 more ceramic water filters this trip and ran out. We need to purchase more when we return in May. They are constructed by pottery artisans in another part of Honduras. These \$26 filters turn contaminated drinking water into safe potable water.

Salitre

Salitre, and their new leader, Adan, have been doing a great job expanding project installation. Cook stoves, filters, and latrines are being installed at a rapid rate. The people of Salitre have no natural water sources and no piped water. This means the people have to walk 90 minutes or more to the nearest stream to get any water (contaminated). We are trying a new intervention this trip. 20 families were provided with a 55 gallon barrel and a 10 foot PVC pipe that would be converted into a gutter to collect rain water. We are hopeful this will enable people to avoid the 90 minutes walk for at least 4-5 months a year, during the rainy season. We in the US often take clean water for granted. The people in Salitre are so happy to receive \$40 worth of materials that can save them hours a week from carrying 50 lbs of water up a mountainside 1-3 times a day. We do not have another solution for water in the dry season at this time.

39 of 44 homes in Salitre now have an improved cook stove. Given how life transforming these stoves can be, the improvements in health for the community are amazing. 8 homes have water filters, with

more homes getting filters in the next few weeks. 8 homes have latrines. Four homes are getting pilas built. Given the pace this community is bringing interventions to the homes, we expect great improvements in health for Salitre over the next few years.

Other rural development activities

The Honduran who has been overseeing our projects while we are not there has stepped down. Over the past few years he was not as active in helping people get these needed interventions. Edys Reyes from San Jose Centro has joined our efforts to improve health outcomes for the people in his larger community. So far, he has been proactive and a big help getting projects going again. We are hoping to see an expansion of completed projects very soon.

Agriculture

Heirloom seeds

Many other types of heirloom seeds were brought and distributed. The family we are working closely with for coffee farming has been most

motivated to try different vegetable seeds. They are successfully growing scorpion hot peppers and can harvest the seeds soon to expand production.

Coffee Farming Cooperative

In May we brought back 35 pounds of coffee from one farm. The two varieties of coffee, Lempira, and Indio, sold out in our office within 2 hours of going on sale. People report back the coffee is very good. This trip, we brought back 100 pounds of coffee. Given the farmers make a bit over one dollar when selling locally and we sold for \$10 per pound, they are very happy with the additional income. Everyone wins from this farm to table approach. Farmers make a living wage and customers get exceptionally fresh and delicious coffee.

Update of Violent Attack One Year Ago

While we were in San Jose, an arrest was made of a man believed to be the attacker of a San Jose woman one year ago. As some may remember, due to a domestic dispute a woman was attacked by a



Barrel and pipe to collect rain water

man with a machete. Our team members were able to stabilize the woman and transport her to a hospital, but she died from her injuries. Hopefully, justice will be served.

Project	Completed	Project	Completed
Cookstoves	351	Scholarships	100+ students, 36 current scholars
Filters	396	Fluoride varnish	>470 children this trip
Latrines	158	Fish farms	6
Pilas	117	Piped water systems	5 communities
Heirloom seeds	>15,000 given		

Update on Project Status (updated 11/05/2019)

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 set backs. 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

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



Front row: Paulet, Melissa, Alisa, Alix, Stephanie, Heydi, Zoe, Kailyn, Carol.

Back row: Diego, Doug, Sophina, Roger.

Other photos



Children performing traditional dance

Child taking entrance test for scholarship



The views in the San Jose area are stunning! This view is from Doug's Point (named by residents)