Honduras Trip Report – October-November 2012

Department of Family Medicine, University of Rochester

Participants	
Faculty Laurie Stannard	<u>Unitarian Church</u> Kirsten Nagel
Douglas Stockman	
	<u>Interpreters</u>
Residents	Alex, Catherine, Eduardo, Paulette
R-1s: Christi Cameron, Yule Lee, Craig	
Betchart, Karolina Lis, Nicole Vavrina	Shoulder to Shoulder Representatives
R-2s: Sophia Purekal, Thomas Gregg, Jen	Kate Truijo
Hathorn	
R-3s: Monica Leibovici	<u>Dentist</u>
Te 55. Monieu Estovioi	None

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 an NGO called Shoulder to Shoulder and 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 2012 trip.

Travel and General Comments

There were no problems with travel. This was the first time in 18 trips that not a single member of the group had diarrhea. Many participants developed a cold, but all agreed this is preferable to traveler's diarrhea (especially when using latrines). We again enjoyed the excellent Honduran cooking of Maria, so food was eaten in abundance and trip members loved not having to do dishes for 2 weeks! October is nearing the end of the rainy season. It rained every afternoon for the first 4-5 days, but then we had blue skies for the rest of the trip. This made the long hikes to neighboring villages much more pleasant, and less dangerous. The trails are in steep mountains and become more slippery when wet. The nice thing about going near the end of the rainy season is we all have enough water from area streams to get a bucket bath every day. Participants worked hard, worked well as a team, got much accomplished, learned much, and had fun.

Meetings

Much of our time in San Jose is spent in meetings. We work very hard to ensure excellent communication with San Jose residents. We want to understand the important issues for the San Jose people and work closely with them. The Sunday we arrived in San Jose was spent meeting with representative from the villages. This three hour meeting helps define what projects will be pursued during our two weeks in Honduras. Then throughout the two weeks other smaller meetings that address specific projects occur. It is not uncommon to have 2-3 meetings a day on various topics.

Water Projects

Piped water projects

The previously installed piped water projects continue to go well. A leak had developed in the Portillon water tank but that is now repaired and all 5 projects are working as designed. When the tank was initially constructed, the unskilled workers did not follow the instructions correctly and a small hole developed over time. Ferro-cement water tanks require much more attention to detail than traditional block or stone tanks, but cost less to construct.

The owners of five homes in San Jose Centro that did not participate in the government water project are now requesting our help capturing and distributing the water from a small spring. We are beginning to design the system and ensure adequate water volume is available in the dry season. We again met with representatives from the distant village of Coyolar in the Delicias township and discussed a piped water system for their community. We hope this project is possible, but more study needs to be completed.

The government water project for San Jose that will bring water from 40 km (~25 miles) away and was started over three years ago continues to have difficulties. The communities that we work with are near the end of the water lines and pipes keep breaking for various reasons. The end result is that most homes in the area have received only a few days of water in the past three years. We hope the problems are corrected soon and the system becomes reliable. Huge health benefits result from having clean water of sufficient amounts.

Water Filters

The small ceramic (clay) Potters for Peace filters we introduced to the area continue to work well and are much sought after. People outside the project area continue to request these filters. The one downside of the filters are that they do not filter enough water per day for a large family. We have so far not allowed families to purchase two filters because we have limits on how many filters we have the resources to purchase, and many homes still do not have any filter. We also do not allow people outside our project area to purchase filters because of the cost. Each filter costs about \$18. This is too costly for most people in the area so we request \$2 which is much more affordable.

We introduced slow sand filters to the area when we first started working in San Jose. Although the up front cost is double the cost of a Potters for Peace filter, they can filter more water and can last many years with appropriate care. The San Jose people preferred the Potters for Peace filters so we have moved in this direction. Now a few people have expressed an interest in the slow sand filter. Next trip we hope to build 1-2 filters in homes and see how this intervention works long term

Latrines

The demand for ventilated improved pit (VIP) latrines remains high. To date we have helped build about 100 latrines and we received requests during this trip for about 60 more. A number of people already have the 10 foot deep hole ready and construction will start in the next few days. For a home owner, building a latrine requires a huge amount of work. They first have to dig the hole using a pickax and shovel. This can take 2-3 days of back breaking work. Then they have to do two days of communal labor as payment for all the materials we provide. Next they must help with the construction of a latrine at another home. This educates them through hands on activity what is needed to build the latrine. Then they have to come to San Jose to cut the ree-bar and carry the bar to their home. Next, they have to carry three bags of cement (100 lb each) back to their home. For the most distant families, this means making three to five trips with up to 100 lb on their back walking up and down mountain trails for up to three hours. If they do not have sand and gravel near their home, they must also carry these materials on their backs. Even with all this work, the latrines are very popular. Given the huge amount of work

involved, we do not charge money for latrines. We pay over \$100 for each latrine. Given the health benefits, we feel it is money well spent.

As part of the government water project, every home that got piped water was required to also install a water flushed toilet (different than our toilets). When there is sufficient water, these toilets are nicer than latrines because there is no smell. They cannot be used when there is no water. Given there still is no water being delivered to San Jose communities, people with these toilets are still using the bushes. They are requesting our VIP latrines.

Pilas

It is common practice in Honduras for most homes to have something called a pila. This handmade structure serves as a water storage tank, a kitchen sink, and a laundry/washing area. Because water is in such short supply and often only flows for a brief time each day, most homes fill up their pila when the water is flowing and then use the water from the pila throughout the day as needed. The pila has a built-in washboard so that people can wash clothing by hand. It also serves as a common work surface while cooking. We have completed 54 pilas as of this trip. We anticipate another 42 being built over the next six months.



The three men just completed building this pila

Education & Schools

<u>School Curriculum Teaching Sessions – Creation Stories/Masks</u>:

A teaching curriculum ("Creation Stories/Masks"), developed by members of the First Unitarian Church's Honduras Task Force, was presented to and completed with students from all five elementary schools in San Jose. This project, which involved the reading of a Mayan Creation Tale followed by the construction of unique masks based on characters in the story, was worked on with students in the 4th, 5th, and 6th grades from the San Jose Centro, Portillon, Guanacaste, El Horno, and Potreros schools. In total, approximately 130 students participated in this curriculum project. Numerous masks created by Honduran students were brought back to Rochester to share with local children; in exchange, the

Honduran students received an already-created mask from an American student. Almost all students (even the oldest!) were very receptive to the project, though it always takes some initial prompting to have them fully utilize their creative juices.

6th Grade Scholarship Applications:

Kirsten Nagel, representative from the First Unitarian Church of Rochester, held a meeting for 6th grade scholarship applicants from the five elementary schools of San Jose. In total, thirty students (most with their parents) attended, with representation from all five of the schools. Some of the families currently have a student in the scholarship program and are looking for financial support to send a second child through colegio. During the meeting, Kirsten reviewed all necessary scholarship



Kirsten and Monica assist the students in creating their own mask

information, including where funds come from, what funds can be used for, expectations for scholarship recipients, and when/how selected students will be announced. After Kirsten relayed the details of the

scholarship program, all students lined up to obtain and fill out their applications. While students filled out their applications, parents were called up one at a time to fill out a financial information form with a brigade member. Photos of all students were taken following the completion of the forms. Scholarship recipients for the 7th grade will be announced by Marvin Cacho, representative from Shoulder to Shoulder, in January 2013.

Scholarships for Colegio:

A meeting was held for current scholarship recipients from the 7th, 8th, 9th, and 10th grades. Kirsten Nagel (First Unitarian Church representative) led this meeting, and utilized support from Honduran translators when presenting and when collecting necessary paperwork from scholarship recipients. The importance of maintaining grades above 60% in all classes, completing necessary scholarship paperwork, and attending weekly tutoring sessions was discussed during this meeting. Students in the 8th, 9th, and 10th grades were presented with letters from individual donors and, in turn, wrote return letters during the latter half of the meeting. All twelve 7th, 8th, and 9th grade scholarship recipients showed up to the scholarship meeting (or, in one case, a father showed up because his daughter was sick). In addition, Jose Leonel, a former scholarship recipient whom the church did not support in May, attended with his mother; ultimately, Kirsten decided to reinstate him in the program, as he's continued with school and improved his grades.

Francisca, one of the two 10th grade scholarship recipients (who's currently in "carrera," the Honduras equivalent of high school), attended the meeting and provided Kirsten with her current school information. Francisca was willing to speak with the 9th grade scholarship recipients about moving on to carrera and her own experience moving away from the San Jose area. Kirsten later received budget proposals for carrera from three of the four current 9th grade students. These youth seem motivated to continue with their studies pending additional financial support from the Unitarian Church and/or individual donors!

Tutoring Program for Scholarship Recipients:

A meeting was held with Santa Froglan, the tutor for scholarship recipients and a teacher at the Portillon school, about the educational progress of the students, where tutoring sessions are being held (which is currently in the community building), and the details of his attendance sheets. Santa continues to take weekly attendance and plans to continue to oversee the Saturday tutoring sessions. Sessions generally run from 8am to 1pm, with most students attending relatively consistently. Later in the week, Kirsten provided Santa with some school materials for tutoring sessions (including notebooks, pencils, erasers, and lined paper).

School Supply Distribution

School supplies, including paper, pencils, colored pencils, crayons, scissors, glue, and erasers, were distributed to the elementary schools in San Jose Centro, Guanacaste, Potreros, Portillon, El Horno, and Las Delicias. Additionally, the kindergartens in Guanacaste and La Calera received a small amount of school supplies. Most of these supplies were distributed in conjunction with a visit, curriculum teaching session, and health education song/skit by various members of the brigade.

English Teaching Session with Guanacaste School Teachers:

An English teaching session was held with three teachers from the Guanacaste elementary school. Kirsten (First Unitarian Church Representative) and Jen (2nd year resident) met with the teachers for 1.5 hours and worked with them on vocabulary, pronunciation, and sentence structure. English vocabulary

generally focused on family words (mother, father, daughter, son, grandmother, etc.) and household items (bed, table, chairs, etc.). The teachers seemed to enjoy the lesson, though pronunciation seemed difficult for them.

Kirsten Nagel

School Health Education Project

What a success! The growth of the School Education Program this brigade was incredible. The goal at the beginning of the trip was to go to all 5 of the primary schools in our community and provide basic health education – we accomplished that goal! The emphasis in the planning stage was to lay a broad foundation that set the stage for future brigades to build on in our effort to positively impact the health habits of the up and coming generations in our sister community of San Jose, Honduras.

The theme of the education this trip was "The Germ Theory". Although most of the planning for the lesson was done before arriving on site, there was still a lot of participation from the group to put the finishing touches on. It took collective genius to write the song (to the tune of *Row, Row, Row Your Boat*), design the posters, and of course practice the skit. The lesson was designed to work around the teaching that was being done by Kirsten, the volunteer from the Unitarian Church in Rochester who also had a prepared lesson that she presented at each school.

We made contact with one of the teachers at the San Jose school the second day we arrived who had phone numbers for the other teachers at the outlying schools. This allowed us to contact each school and set up dates during the brigade that were mutually available. To reach each school, other than the one in San Jose Centro, we had to hike about one hour each way – often in the hot midday sun. It was a quite a challenge that the team met with ease. Once at the school we did an opening activity with glitter to demonstrate how easily germs spread. Then Kirsten taught her lesson in Spanish and we all helped with the activity associated with her teaching. After that we did our short health lesson to cement the concept

that germs have the potential to make people sick. We ended the lesson by teaching them the song which reinforced the take home points about preventing the spread of germs 1) Don't touch poop, pee or blood, 2) Cover your mouth when you cough, and 3) Wash your hands before you eat. It's a silly song that the kids thought was fun, even though they were a little embarrassed to sing the part about the poop and pee. After this we assembled the entire school and preformed the skit which included a large amount of silly string and a hot pink wig!

The kids we worked with (and the teachers as well) were open and receptive to our presence. One of the teachers offered up a few ideas for topics he thought the kids should learn on future trips. At one of the schools a few of the kids preformed some



The school children loved the gringa's skit about germs

songs for us before we left in a show of gratitude. It was rewarding to see some of the same kids later on in the brigade singing the song we taught them or remembering to cover their mouth when they had to cough. Looking forward to future brigades I anticipate many more fun teaching sessions on different topics both medical and psychosocial. Jen Hathorn

Microfinance

The microfinance project of the Honduras brigade met with some new challenges on this most recent trip. The project started off on its usual footing, with the announcement, at the first Sunday meeting, of plans for our meetings and interviews throughout our 2week stay. We also made an announcement about the expectations for repayment from people who had received loans during the May 2012 trip. As the days went on, however, few people came to see us with their repayments. With people failing to come see us, Tom Gregg and I then decided to hit the road! Accompanied at different times by others of the brigade group, we visited our small business owner/loan recipients in Guanacaste, Portillon and La Calera, and Portreros, as well as in San Jose Centro. We did receive full repayment from some of our loan holders, and partial from others. Individuals we met with each had his or her own circumstance impeding repayment. Amongst the problems that people discussed with us were the depressed price of corn, the expense of having electricity hooked up to their homes, health problems, business failure due to theft, and expenses related to children's schooling. All in all we received less than a third of the money that was owed to us. Everyone who still owes us loan repayment was met with personally and/or received a letter from us explaining that we expect repayment in May 2013.

Having repayment go less well on this trip has prompted the microfinance team — both while we were in Honduras and since our return — to revisit our policies on how to penalize people who are in default. Our challenge is to impress upon the community the importance of timely honoring of the loans, but still respecting the challenges in their lives and treating them fairly. Our discussions on what we should do differently during the next trip continue, and our policies are in progressive refinement.

However, the trip did celebrate some lovely successes. The amount of money we could loan out was limited by our restricted funds, but we did renew loans to a few of our past recipients who were able to pay us back. We also awarded loans to three brand new applicants. We are excited about the pig-raising business in Guanacaste, the new community vendor of reusable (cloth) diapers and shampoo, and the new pulpuria in San Jose.

Although we were not completely satisfied with the outcomes of our work, the work itself was a pleasure to do. Tom and I and the others enjoyed each hike we made, appreciated this opportunity to learn about our communities, and to have very interesting conversations with loan recipients past and present. Overall we came away feeling that we tackled a challenging job and addressed its demands thoroughly, supported some thriving businesses and had been given new insight into the people of San Jose and surrounding communities.

I invite anyone who would like to know more about the work of the microfinance project, or to see a copy of our balance sheet from this past trip, to contact me at sophia_purekal@urmc.rochester.edu.

Medical care

The clinic operated every day we were there, except on Sunday, when we were only open for emergencies. Patient volume was about the same as most trips. The table to the right lists the most common diagnoses. We did see a fair amount of respiratory infections, mainly in small children. Very few people presented with diarrhea or scabies; both being very common complaints from a few years ago. One man presented with a machete wound to his finger that was at least 4-5 days old and would most likely require aggressive surgical intervention, possibly amputation. We arranged for him to go to the nearest facility with surgical capabilities (1.5 hours away by car).

Diagnosis	Frequency
VIRAL URI	13
WORMS	10
COUGH	7
MYALGIAS	6
PNEUMONIA	6
GERD	5
HEADACHE	5
RASH	4
ALLERGIC RHINITIS	4

One patient probably had TB, given their symptoms and a positive family history. TB remains a significant health problem in the area. Although the government provides free TB treatment, case management and ensuring treatment is extremely difficult. A man in our community died about three

years ago from TB. Upon discharge from an area hospital, he did not understand the need for follow up and no one from the government made the 1-2 hour hike to his house to re-engage him in treatment. Seeing deaths that could have been avoided are very difficult emotionally.

A story about a small child

It was a morning clinic and a family including a grandmother, mother, and two children where walking up the path to the clinic. The baby being carried by the grandmother caught my attention. She was lying in her grandmother's arms and her body was contorted. Arms tight to her chest with her hands clenched

in fists. Her knees where bent up in the fetal position toes curled tightly. Her eyes were not focusing on any person or object instead roaming around and darting at loud noises. She was making some quiet noises but nothing resembling words. When they reached the clinic and checked-in I jumped at the chance to examine the baby. The story I got was that she was 1 year old. She had had a normal uncomplicated birth but had not grown or reached any of the expected milestones since then. She could not sit or hold her head up. She could not eat solids. She had not seen a doctor since she was sent home from the hospital that she was born in. The family was concerned about her "weakness". They wanted to know what she had and what could be done to make her better. I spent the next 45 minutes talking with them about the diagnosis I presumed she had (cerebral palsy). I



Jen examines a child with probable cerebral palsy

demonstrated how they could do simple stretching exercises on her legs and arms. I stressed that it was important for them stretch her muscles daily. I placed small fabric roles in her hands to help prevent contracture formation. While I was stretching her muscles and messaging her back, we talked about the stressors both real and potential they were facing by raising a child with her diagnosis. Grandmother and mother were adamant that there was no issue - they would care for her just fine. She was not a burden for them. The encounter ended and they purchased some items from the pharmacy and walked back down the trail towards their home. Jen Hathorn

Interns Home-Visit Trek

Some of us had the opportunity to make a home visit after a woman came in concerned for her mother whose condition prevented her from traveling to the clinic. The interns decided to pack up a medical kit and go on an afternoon trek through the bush to Guanacaste to provide care for this patient. The patient was an elderly woman in her 60s who had recently suffered a head injury after being attacked by a local man with his machete. She had initially been taken to a hospital two hours away where emergent care was provided, including suturing of her head laceration and multiple blood transfusions. Since that time she had progressively gotten weaker, unsteady on her feet, dizzy, and had decreased appetite. She was complaining of severe unilateral burning headaches. Her daughter also mentioned that she had developed watery non-bloody diarrhea over the past couple of weeks which was contributing to her weakness and decrease in appetite.

The patient's home was located in the upper hills of Guanacaste, one of the regions poorest areas. Upon arrival at their home, we found the patient lying in bed, unable to get up on her own. We helped move her into the daylight for our examination, as there was no electricity in the home. The patient was gaunt, pale and appeared disheveled, with flat affect. Her physical exam was grossly normal apart from decreased muscle strength throughout, pale conjunctivae, dry mucus membranes and what appeared to

be a healing 4 inch laceration overlying the right temporal region of her head. It was clear to us she was dehydrated, anemic and malnourished. Given our limited resources at the time we had to think on our feet and we suggested she take in more filtered water and consume some bananas, which the family had growing on their property. As the patient's condition was stable we returned to the clinic to gather a package of medications and supplements to be brought back to her. The family was extremely poor so we decided to all contribute to cover part of the expenses.

On our way back from Guanacaste to San Jose central we happened upon some local villagers who expressed their gratitude to us for making the trip. It was very rewarding to get the opportunity to

provide care for someone in their home and to get a snapshot of what life is like for them on a daily basis. As we debriefed with the rest of the group back in San Jose, we realized how important it is for us to reach out to the community through home visits. Not only is it a good experience for us to gain perspective, but it is also an opportunity for us to have a larger presence within the community and to provide resources more directly. There are likely many other people whose health conditions prevent them from visiting our clinic and they could benefit from our help through home visits. Perhaps this is something we should strive to make an integral part of our future trips. Karolina & Nicki

Cookstoves

The improved cookstoves we designed remain a very desirable "appliance" with over 170 completed. About 10 people attended a recent educational demonstration. People interested in getting a cookstove for their home must attend this educational meeting. After they better understand how to build the stove, they must build the mud or adobe block table that supports the stove. Then the villager pays



Manuel teaches cookstove construction by just doing it

about \$5 for the stove that costs about \$48 to build. The main expense for the stove involve a large flat metal plate which is the cooking surface and the metal pipe for the chimney. The rest of the stove is made from local materials. This allows the stove owner to perform their own repairs as needed without outside financial help. Given our "see one, do one, teach one" approach, the owner has helped build at

least two stoves and is capable of repairing any problems with their stove. Over the past six months, 16 more stoves were built. We anticipate another 40 stoves will be built over the next six months.

Agriculture

Although agriculture has not yet been our main focus, we have made a number of small agricultural interventions. Some of these include the introduction of new seed types, fish farms and improved access to fertilizers.

Families continue to express interest in our fish farms project. These tilapia fish farms serve as an additional food source, providing increased access to protein in an area where malnutrition has been an issue. They also provide some families with supplemental income when they are able to sell some of their harvest. The main barrier to creating a fish farm is having a flat piece of land with a year-round



One of the larger fish farms

water source. In addition, families have to dig a 3-6 foot deep pond by hand, which can take weeks with a pickax and shovel.

We visited two fish farms during this trip. The first fish farm was approximately 3 x 6 feet in size. The second fish farm was approximately 8 x 12 feet. Both are producing fish for family consumption. The larger fish farm is also producing enough fish for the family to sell at the market for additional revenue. We continue to encourage fish farmers to throw out their small fish to prevent overcrowding and allow room for larger fish to grow.

In addition to visiting family fish farms, we had visits from others with fish farms. They are all going well and a number of families have built second fish farms to increase production. We continue to identify families that have access to year-round water, a bit of flat land, and land that can hold water (not too porous). It is always amazing to see tilapia come out of small holes filled with muddy water.

Dental Program

We were unable to have a dentist join our group this trip. However, our dental director, Lina Vega, DDS, recently moved to Texas where she is now on faculty at a dental school. We are anticipating the dental school supporting Dr. Vega to increase trips with dentists and bring along dental students.

Our fluoride rinse program in area schools continues to operate and reduce dental caries in school-aged children. We distributed more fluoride packets for the next six months. We are exploring methods to get fluoride to students during their two month "summer" vacation.

Woman's Health

The local midwives (parteras) serve as respected leaders in this community. They can be liaisons for the local health clinic (offered through the government), are valued educators, and offer home birthing assistance for those unable to get to the nearest hospital (at least an hour away by road). Their services are also highly important to those who have reservations about going to the hospital/ seeking formal pregnancy care, which, without the midwives, would not have monitoring during their pregnancies and the birthing of their children.

During this trip we conducted our semi-annual meeting with the midwives (each who traveled at least 1-2 hours by foot to get to our gathering). This year's meeting focused on education via a question and answer session, providing medical supplies, evaluation of our previous trip interventions, assessing the future needs of the midwives and their communities, and evaluation of barriers to health for their respective areas.

The educational aspect of our meeting concentrated on management of obstetrical emergencies such as meconium aspiration, shoulder dystocia and breech presentation. We were able to offer sterile suction bulbs for meconium aspiration and developed ideas for improvement to the 'delivery kits' that we typically offer. There was demonstration and discussion of proper wound care and identifying early signs of infection. It was also noted that the midwives are now moving to doing a lower volume of home deliveries and some are transitioning into more of a role of 'health educator'. The fear for them is that as they grow older, no one will take on the role of local midwife because they provide their services for free and the time requirement of this job is quite heavy/ unpredictable. We also discussed barriers to healthful practices such as condom and prenatal vitamin use, which according to the midwives' discussions with the communities, is mainly an issue of access.

Thus, future goals for this initiative include continuing to strengthen health teaching with this group and recruiting local health volunteers (including the formally government employed 'health volunteers' as well as reaching out to those in the community who wish to take initiative with improving their community's health). We hope to continue to engage and empower the community in health improvement by providing anticipatory guidance regarding issues, which now include overweight/ obesity with their changing accessibility to car travel, roads, and processed foods. The hope is to recruit other leaders (similar to leadership we have seen with other projects such as the cookstoves) to educate, anticipate, and prevent the health issues that are typically seen with weight gain. Christine Cameron and Lorie Stannard

Las Delicias

The hike to Delicias was a welcome challenge this year to a four member crew: Interns Craig Betchart and Christy Cameron who were accompanied by Shoulder to Shoulder brigade leader Kate Trujillo and Interpreter Eduardo. We were guided to Delicias by Don Pedro, one of the Delicias community leaders. As always, liters of water were consumed and liters of sweat excreted.

The goals of this trip included the following: to answer any remaining questions that the community had regarding the projects; to specify the requirements that need fulfilment in order to qualify to receive a project; to assess the possibility of fish farms and to inspect finished cookstoves and latrines.

We held a meeting at the school in Coyolar, a small community on the way to Delicias. The meeting was a success in that over 30 people arrived. We discussed details of the projects including the costs to them personally and the community service time required. We also collected names of people interested in specific projects.

Following the meeting, we walked to homes that had built either cookstoves or latrines to ensure they were built correctly. All the projects appeared successful and built to specifications. At one home, we encountered a litter of 15 day old puppies!



The Delicias hikers can attest to the fact that there is no flat land in the San Jose area (Christi is behind the camera)

Many people in the community were interested in fish farms. However, the only year-round water supply is located below the houses where those interested in the fish farms live. The only option for these people would be to place a fish farm off of their own property. Don Pedro was not enthusiastic about this option, but suggested it could be looked into.

The other household interested in a fish farm was located in Coyolar. The water source he intended to use for his fish farm was located across the valley about half a mild away. Although the home was located below the water source, he is situated more than 200 ft above the valley floor, which would result in too much pressure in the piping. He is left with a similar alternative to put the fish-farm below his own property. (Craig Betchart)

Odds & Ends and General Comments

Given we do not have US personnel on the ground in San Jose year round, we continually explore methods to improve outcomes/project completion when we are not there. Although achieving improvements can be difficult, the program will be more sustainable if Hondurans can reliably run programs without direct supervision. We are making progress on this front and have improved project tracking.

Honduras is going through a transition. When we are in cities where people have more money, we observe that obesity is becoming a problem. As this happens, well-to-do Honduras are beginning to experience "US" health problems such as hypertension, diabetes and heart disease. Although the vast majority of San Jose residents survive on less than \$2/day and must perform hard physical labor, there will be a time when better off San Jose residents start gaining weight. We are gearing up to begin education about avoiding overweight problems to directed groups.

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, MD".

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. Seeing the smiles and appreciation as people display their running water, new cookstove, 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

Photo links Yule

https://plus.google.com/photos/103830527237495337816/albums/5808884390169419841?authkey=CJGe1Jj-i-n31gE

Craig

https://picasaweb.google.com/craig.betchart/Delicias

