

Honduras Trip Report – May 2010
Department of Family Medicine, University of Rochester

Participants	
<u>Faculty</u> Lorie Carpenter, FNP Rebecca Dwyer Barbara Gawinski, PhD Lindsay Phillips Douglas Stockman <u>Residents</u> Anh Bui Ann Corbett Melanie Gnazzo Edith Hui Erin (Horn) Lineman Debbie Roessler Liz Terragnoli <u>Dentist</u> Frank Carberry, DDS Lina Vega (dental resident)	<u>Medical Student</u> Christopher Chang <u>Others</u> Lynne Davidson James Wentworth Ben Carpenter <u>Interpreters</u> Alex, Edna, Juana, Pedro <u>Shoulder to Shoulder Representatives</u> Marvin Cacho

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 May 2010 trip.

Travel and General Comments

There were no problems with travel. The vast majority of the group remained healthy throughout the trip. 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! The rainy season started early again this year. We had no rain for the first week of the trip and water was running a bit low, but then we had rain every day during the second week and group members could use a full bucket of water for bathing. Due to the Honduran political problems last year and our inability to go, we took a much larger group than normal this trip (18). Even with very cramped conditions, everyone worked together as a team and minimized the challenges overcrowding presented. However, we do hope to take no more than 12 members in the future.

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

We received updates from the three piped water projects we have installed previously. The existing projects continue to work well. We also met with groups from San Jose Centro, Guanacaste and Potrerillos about their hopes for help on their projects. All three villages hope to get water from a government water project. The government water project involves bringing water from a source 40 km away. This is a huge project that will provide much needed water to thousands of rural inhabitants. Unfortunately, a number of technical difficulties have arisen that has delayed the project and not allowed water to reach the San Jose area. We are waiting for the government to solve these problems before completing the water distribution systems in the San Jose area. This government water project is the best hope for most people in the area to have access to water. As part of pay-back for the government water project, each house getting water from the government project must dig 10 meters (about 34 feet) of trench every week until the 40 kms of pipe is buried in the ground. Most Americans cannot appreciate the fact that all this work is being done so each community member can have access to 2.5 gallons (10 liters) of water each day! Water is the most precious resource humans have, but Rochesterians do not fully appreciate this because of our local abundance of water.



San Jose Centro water tank

Water Filters

Community members continue to request Honduran-made Potters-for-Peace filters. The ground water that people must use has hundreds to thousands of diarrhea-causing bacteria in every cup. These low cost filters remove all the bacteria and make the water safe for consumption. We obtained 50 more filters for distribution. Elia, San Jose's Honduran Community Health Worker (CHW), now does the training and distribution of filters. Her teaching methods were observed. She is doing a great job with the training, tracking and distribution. We are getting closer to our goal of having filters in every home in the area.

Latrines

People continue to request latrine for their homes. A number have been built under the guidance of Elia and Manuel over the past year when we were not able to be in Honduras due to political problems. This trip, we held a training class on latrine construction for interested community members. The members dig the demonstration latrine as part of the learning process. We expect to build at least 10 more latrines in the next few months, weather permitting.



Elia teaching proper use of Potters-for-Peace water filters



Volunteers digging latrine hole

Domestic Violence

Domestic violence (DV) is a significant problem both in the US and the rest of the world. San Jose is no exception. Last year we began the process of evaluating this sensitive issue and expanded on this topic this trip. We met with women leaders as one group and progressive-thinking men as another group to explore the DV issue.

Excerpts from the Woman's DV group

The discussion focused on warning signs, the cycle of violence, and the impact of violence on the women, children, and community. Two women reported that they had conducted a community meeting on domestic violence in their community of Potrereros. All women agreed that alcohol was a major problem.

The women reported that they had presented to the mayor the issue of alcohol abuse and the impact the related violence has in the community. They were hoping he would ban the sale of alcohol in el Rancho, but that was not the mayor's decision. With alcohol use, violence follows, from their perspective

Between now and the next brigade, the women agreed that they would meet with women to talk more openly about how to identify signs of violence, how to talk with each other about solutions to keep peace in the home and community, how to share power in the home regarding money and chores, and how to raise children with peace so that they will have peace in their home and community.



Women's domestic violence participants

Summary from the Men's DV group

Members of the Rochester group met with four San Jose men to discuss Inter-Partner Violence (IPV). Every participant agrees that IPV is a problem in the San Jose area. Some of the identified contributors

to IPV include alcohol, poverty, control issues, and negative input from other community members. The men offered an expanded view of the IPV problem that includes women sometimes as the perpetrator (boiling water thrown on male partner), envy from other community members who then spread rumors of infidelity which leads to problems, and an appreciation for the roles both partners may play in domestic violence. The men did acknowledge the increased presence of the Honduran police in removing the abusive partner, which was seen to be a positive development in many cases, but can complicate the dynamics between partners. The meeting participants agreed that further efforts must be directed to IPV given the scope and severity of the problem. The participants discussed the formation of a committee to create long term solutions.

Child Health Initiative

We participated in a Shoulder to Shoulder funded Child Health Initiative. This program targets school children and involves gathering basic population health data (height, weight, visual acuity, etc) as well as performing a basic physical exam, dispensing multivitamins/iron and worm medicine. We visited three of the five area schools and screened over 250 children in the San Jose township. Although this activity sometimes feels like an assembly line, this allowed us to get out in the communities and interact with many children.



Erin attempting a vision screen during CHI



Liz enjoying interviewing during CHI

Education & Schools

First Unitarian Church Middle School Scholarships

The brigade members and translator, lead by Barbara Gawinski, met with parents and children, then divided into two groups to discuss successes and difficulties for students and families of scholarship recipients. Although all 20 families attended; only 19 students plan to continue for the second half of the year. One major sign of success is that motivated parents created a parent committee whose main aim is to ensure the best outcomes for the students. The committee met with the rest of the parents after the meeting with the Rochester group. The committee has met with teachers and the director of the school with concerns they have. Teachers have increased the frequency of testing to see if that might help the students retain knowledge more and improve test scores. Second year students reported less difficulty this year in adjusting to the routine, as they are familiar with the living situation, studying schedule, and activities of daily living. At the large group meeting, the expectations were outline for what students need to do to continue to receive scholarships: attend class regularly, be punctual, do homework, study 4 hours a day, love to learn, use scholarship money for school only, obtain a grade of at least 60% in each class.



Scholars with their parents



Scholars have taught parents how to sign their name

The parents discussed the difficulty they experience trying to advocate for their children. They were given applause for all their efforts in support, advocating, and encouraging their children. They were also encouraged to be a little harder on them for more studying.

The children reported they enjoy music, art, and physical education. Some reported enjoying their teachers and the support they get. They found living together going well and cooking separately the easiest way to manage the rooming and boarding. Most are expecting to go to summer school to get extra help and bring their grades up for next year. They all agreed that they are learning to speak up and ask questions, but that it has been difficult.

First Aid Kits for Schools

We had 13 teachers from 5 schools (Portillon sent regrets) join Lorie, Erin and Lindsay for a 90 minute first aid session. All schools still had the first aid book and kit with supplies of bandaids, antibiotic ointment, analgesics and soap running low. There were also requests for ace bandages in the future. We had wonderful interactive teaching sessions on foreign bodies in ears/noses; care of wounds from minor to major; diarrhea and fainting. The teachers asked thoughtful questions and requested a new module for the first aid book regarding fainting. All agreed the next topics to address should be nose bleeds and pubertal changes including menstruation. The teachers currently do divide students by age (not grade level) for discussion of puberty and would love some more education themselves regarding this topic.

As well, we provided some basic supplies to the Kinder in La Calera. The other kinders have access to the first aid kit and supplies in their schools.

Educational Program for Community Members

Teacher Education

We were again fortunate enough to meet with area school teachers. The teachers are required to teach English to their students but do not speak English themselves. Therefore, our group held a conversational English language class that was again very well received. We also introduced different methods of teaching students that attempts to make learning more fun and interactive. Teaching methods in rural Honduras seem to rely heavily on rote memorization without much opportunity for creative thought and problem solving. One recurring problem in Honduras that adversely affects student education is teacher strikes and teacher turn-over. A number of teachers did not participate in

the meetings because of job security issues and pending strike activities. We also learned that different schools have teachers supported/provided by different agencies.

Excerpts from the Teacher Education Class

Barbara Gawinski introduced the curriculum for “Fernando’s Gift” developed by the First Unitarian Church of Rochester utilizing the first and fifth lessons. Teachers responded well to the process of learning. Brigade members modeled enthusiastic participation.



Liz working with teachers on English skills

Feedback: Teachers expressed gratitude for using a book from this region that had easy application to the students. The method of helping students learn about the parts of the story was useful and concrete enough for them to use in class. They expressed that this method is not the typical teaching method for Honduran teacher, but they found it fun and helpful.

Computers for Schools

The community of Portillon learned about a grant opportunity from another agency working in Honduras that would provide computers for their grade school. They were awarded a grant. Now Portillon school has an improved school building with five new computers. The only problem is they have no electricity and are miles from the nearest utility lines. We had heard about their grant request and attempted to get a contact at the granting agency last year, but were unsuccessful. We are still trying to get a contact to see if they can switch out the desk top computers for a couple laptops which could be powered by a small solar electric system. On a more positive note, the San Jose Centro school has petitioned us for two laptops for their school and already have electricity. We hope we can find donors to provide the 2 laptops.

Microfinance

The microfinance team conducted two training sessions while in San José. The first focused on the value of keeping the money associated with a business separate from one’s personal (or household) money. We also focused on the importance of devoting the entirety of a microloan to the business itself rather than diverting some or all of that loan to cover personal expenses. The second presentation was shorter, leaving much of the morning for individual loan consultations. The focus of this second class was to teach a simple method for calculating the earnings of a business.

We finalized loans to two individuals. One loan went to Pedro Guzman, a furniture maker. He had a good understanding of the costs associated with his business, as well as the market for his product and the competition he would face in La Esperanza. He also has considerable experience in building furniture and already owns the tools he will need to run his business. Sr. Guzman requested 3,000 lempira. Given this request is larger than normally granted and Sr. Guzman has not proven his reliability, we loaned him 1,000 lempira to start. At this time, he intends to pay back in full in October and request a larger loan. We also loaned 3,000 lempira to Santos Felicita Santos to help fund the expansion of her fruit selling business. She has received a micro-loan previously and has proven herself

by paying back the prior loan as she has successfully expanded her business. Both new loans are to be repaid, with interest, when the brigade returns in October. The interest payment is calculated as two percent of the loan (which is slightly more than a four percent annual rate). To put this in perspective, the going rate for loans from an area businessman is 10% per month with your land as collateral.

We were encouraged by the attendance at our two classes, the number of people who sought out individual consultations about loans, the promise of one new business (furniture) and one expanded business (fruit), and the payment on a previous loan. We look forward to future opportunities to assist the entrepreneurs of San José.

Medical care

The clinic this trip was well-staffed with our residents, medical student, nurse practitioner, attending physicians and translators. Our patient volume was fairly steady with people coming from the San Jose area and the more remote community of Las Delicias this year. We saw many common concerns, such as diarrhea, pneumonia, upper respiratory infections, rashes, musculoskeletal pain, scabies, vision and hearing loss, and abdominal pain. We performed several pelvic exams, diagnosed a woman with pregnancy, discussed family planning, and treated several couples for presumed sexually transmitted infections.

The two brothers with an unknown genetic syndrome and chronic leg ulcers we have followed over the years came for a checkup and were doing well. Both were walking and their ulcers were much improved. We saw a young man with a machete wound to the hand that resulted in an extensor tendon injury of the



Anh seeing a patient with Pedro's help

middle finger. We were able to construct a splint out of tongue depressors and tape and referred him to a surgeon in La Esperanza, but unfortunately it is unlikely he will be able to go. We also saw an elderly female with a large inguinal hernia. Chris and Rebecca did a home visit to see an 18 year-old-girl in Mangal with abdominal pain. After using the few diagnostic tools on hand (a urine dipstick and pregnancy test), they treated her for a UTI, possible gastritis and probable parasites. As Doug has taught us, people in developing countries are often plagued by multiple conditions at once.

Community Health Workers

Elia continues to do a good job providing curative care, preventive care and rural development. She runs the clinic when we are gone, ensures the school-based fluoride rinse program runs smoothly, distributes folic acid to women of reproductive age, and performs group patient education for the people. Elia also organizes latrine construction, cookstove building, education and distribution of water filters and baby weighing in San Jose Centro. During this brigade we had educational sessions with her reviewing the differential diagnosis of headache, abdominal pain, sexually transmitted infections, and dermatological conditions. Elia will have paid off her two years of service this November and can choose to find a better paying job elsewhere. We enabled Elia to attend CHW school for two years. In

return, she had to work in the San Jose clinic for two years. We of course hope she chooses to stay and serve her community.

We are supporting the training of a second community health worker, Carolina Sanchez. She is doing very well in school and will help out the San Jose community following graduation in January 2011. She will need to work in the San Jose clinic for 2 years to pay back the support we provided for her schooling.

Land/Building

Over the past year, the people of San Jose excavated by hand the site for the volunteer house we plan to build. Given there is no flat land in the area, the villagers had to use pick axes and shovels to dig about 10 feet down into the side of the hill to create flat land large enough for the building. They are part way through doing the same type of digging for the planned clinic. We anticipate the start of construction on the volunteer house in November after the rainy season.



10 ft deep excavation for volunteer house

Patient Education

We used every opportunity we could to present skits on common health topics. Whenever people are waiting around for some meeting or government required activity, we hold brief informal skits on common health topics. Given villagers do not have access to TV, movies, plays, etc., the skits are entertaining as well as educational. Skits on diarrhea, respiratory infections and condom use were well received.



Lorie giving the yearly condom talk

Cookstoves

The improved cookstoves we designed remain a very desirable “appliance”. 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 about \$6 for the stove that costs about \$45 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. The cookstove project has been so successful, we hope to expand this opportunity to surrounding communities.



Erin slinging mud during cookstove class



Proud owners of new cookstove built during class

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. We checked in on 2 of the four fish farms we helped start one year ago. They are both doing well. One of the farms believe they get about 35 fish for eating each month. This has greatly expanded the availability of protein at the home level. The other farm has produced enough fish for home use and can occasionally sell extra fish.

Although the seeds we introduced one year ago germinated well, insects, particularly ants, destroyed all plants before fruit was produced. We clearly have more work to do to improve the quantity and variety of foods available.

We met with a representative of an agricultural Non-Governmental Organization (NGO) based in Honduras called CARITAS. We are hoping to get assistance for local farmers year round to accelerate agricultural interventions. Unfortunately, CARITAS could not offer assistance at this time. Therefore, we will keep pursuing interventions as resources and personnel allow.

Dental Program

We were fortunate to have a dental attending and a dental resident join our group this trip, Dr. Frank Carberry and Dr. Lina Vega respectively. Dr. Carberry has led our efforts to prevent dental disease. He introduced a fluoride rinse program a few years ago. Prior to the dental fluoride program, 83% of school children had active dental caries. Six months after implementing the fluoride program, only 24% had active disease. Because of some glitches in fluoride delivery that are being addressed, about 48% of children had some dental disease this trip. We are confident we can get this disease burden under control. Because of Dr. Vega's huge efforts hiking the six hours to las Delicias as part of the larger group, we now have baseline data for las Delicias children. As expected, the las Delicias children suffer huge disease burden from dental caries. We hope to introduce our fluoride rinse program to the las Delicias area and see similar improvements in dental caries rates.

The curative dental clinic was busy as always. Multiple extractions, draining of abscesses and a few fillings and even a frenulectomy were performed. Given there is no curative dental care in the area,

patients must often suffer for months waiting for our dentists. In addition to the benefit patients get, our family medicine residents learn so much about dental care which will help them later in their professional career.



Lina teaching children about dental care



Edna, Frank, Melanie and Lina doing front-porch dentistry

Over the next 18 months, we hope to build a medical clinic. This permanent building will enable the expansion of curative dental care which is in part dependent on additional dental equipment. We are strengthening our fluoride rinse program in the San Jose area. This rinse program is now being expanded to the las Delicias area. The developments in the dental arena are so exciting. Over the next 10-15 years we anticipate most young adults and children will still have their teeth. This will be a wonderful change compared to the toothless grins that so often greet us presently.

Madrigueas

We had a meeting with the Madreguias to discuss the folic acid project and review the the health needs of the community. Doña Bernarda from Guanacaste and Elia attended. Lindsay Phillips, Rebecca, Erin and Anne were also there. We problem-solved issues related to distributing folic acid to the women. Shoulder to Shoulder initially supplied all the folic acid we needed through a grant they received. That grant has now ended so we must limit our purchases of folic acid to the money available. There isn't enough supply of folic acid to provide it to all women of childbearing age, so the decision was made to try distributing one week's worth of folic acid every month. This will ensure that some supplementation will be available to all the women until more supply is available, and maintain the pattern of women picking up the vitamins every month.

Erin gave a presentation on the complications of childbirth, and Lindsay and Anne gave a presentation on basic nutrition. We also heard from Dona Bernarda about her experience with midwifery and alternative medicine. She is still doing prenatal care, but most women are now giving birth in the hospital, thanks to a government program. She has been told not to intervene in deliveries, because of worries about infection. The most common complications she has encountered are breech deliveries, prematurity and postpartum hemorrhage; she has never seen a shoulder dystocia or postpartum hemorrhage. Most of the babies born in the community are small because of maternal malnutrition. Lindsey reinforced the importance of the water and cookstove projects in improving the nutritional status of the community.

Las Delicias

The University of Rochester chapter of Shoulder to Shoulder has been working in San Marcos de la Sierra for over 5 years now. Our primary work has been with the township of San Jose. Community members from Las Delicias, a nearby village, have been visiting the established medical and dental clinics in San Jose during brigade trips and have asked us to become involved with them as well. This past May, we realized that we might have enough resources, both financial and programmatic, to extend our outreach. Our brigade was asked to do a preliminary needs assessment in the Las Delicias community to assess the feasibility of working with them.

Eight people hiked the mountainous 5-6 hours to Las Delicias to assess local needs and possible benefits to the community from a partnership with our Shoulder to Shoulder group. The trip was physically and emotionally intense, and a lot of valuable information exchange occurred during our 4 ½ day visit. We felt welcomed by community leaders and by individuals as we conducted our



Rugged hikers of Las Delicias

needs assessment during home visits. Similar to our experience in San Jose, the level of poverty is high but the people are very hardworking, respectful and thoughtful. Each of the 7 communities within Las Delicias has distinct challenges, though there were many common themes. The most commonly mentioned needs were access to potable water, improved education, transportation infrastructure (there is no road), more efficient cook stoves, additional latrines, home improvements, nutrition, health care and economic opportunity.

Given the quality of leadership we observed, interest among community members, and improved communications thanks to the advent of cell phones, it seems that we could make a big quality-of-life difference by partnering with the Las Delicias community as we have done in San Jose. We strongly recommend implementing a few small trial projects to get started with our ready and eager partners in La Delicias.

Evening Educational Program:

Every evening brigade members meet for a couple hours to review the activities of the day and hear 1-2 didactic lectures on pertinent topics. With eighteen travelers in this brigade, we had ample opportunity for learning a variety of topics: scabies, microfinance, heat exhaustion, malaria, visual impairment, parasitic worms, vaccinations, nutrition and whole foods, wound care, local animals and nutrition, family structure, indigenous housing, oral health and microbiology, and living in developing worlds. Erin's talk on maternal mortality was the most enjoyable participant learning opportunity with in-class demonstrations on how to prevent infant and maternal mortality.

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: Roxanne Henry”.

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

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



May 2010 Group - Edna, Alex, Lindsay, Rebecca, Melanie, Ben, Chris, Lynne, Frank Pedro, Second Row: Anh, Ann, Juana, Erin, Edith, Doug, Debbie, Lorie, Liz, Lina, Barbara, James