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Summer 2008
Honduras
Our Summer Project

• Our goal was to gain a baseline understanding of the health care needs of the community of Siete de Abril and neighboring communities through interviews with community members and conversations with local health care providers.

• Survey types:
  - Epidemiology: systems-based questions, preventative health
  - Ethnographic: barriers to healthcare, resources available, potential solutions
  - Women’s Health: pregnancies, perinatal health, preventive health
Short Term Goals

• Establish PODEMOS as a Provider of appropriate Health care services in the Communities of Siete de Abril, Monte de Olivios and Las Brisas de Libertad:
  – Use the research conducted this summer to develop an innovative model for international medical service.
  – Beginning in December of 2008 offer a service learning experience for OSU COM students in Honduras that provides valuable services to the people of these communities.
Long Term Goals

• Establish a long-term medical partnership between OSU College of Medicine and health care centers in El Progreso and Siete de Abril to provide international health opportunities for OSU medical students.

• Collaborate with other health professionals to provide dental, optometric, nursing, and public health care.

• Create programs with the goal of sustainability, patient empowerment and preventative medicine.
Long Term Goals Continued

• Provide medical services 4 times per year to Siete de Abril, Villa Soleada and Monte de Olivios via medical brigades from the U.S.
• Train lay-health care workers to manage chronic conditions during absence of health care providers.
• Establish a long-term on-site health clinic.
During the summer of 2008 our logistical support was provided by Students Helping Honduras, an NGO with chapters at 10 universities nationwide. Students Helping Honduras began working in Honduras in 2006.

Through their knowledge of the area and their relationships in the community we were able to effectively form relationships with the people and conduct our research in a safe and ultimately successful manner.

Future collaboration with SHH will provide opportunities to create supervised sustainable programs in Honduras.
In 1998, Hurricane Mitch swept through Honduras wiping out entire villages leaving about 20% of the country or over 1.5 million people homeless*.
The homes in Siete are made out of plastic, corrugated tin, wood and other scavenged material.

In a snapshot of dietary behaviors, 32% of parents reported that their children did not have full protein in their dinner.

The average income per person in Siete de Abril is approximately $1.50 per day as computed through our Women’s Health Survey. A family headed by a single woman makes an average of $35 less per week than that with a married couple. The average age of those in the lowest income quartile is more than a decade older than those in the highest income quartile.
The Villa Soleada (Sunshine Village) was the site of the majority of our interviews.

The workers at the site represent a subpopulation of Siete de Abril that will move in coming months to occupy the newly constructed houses.
Community Members of Siete de Abril rotate working 3 times/week on the construction project. Working on the project is difficult on many of the families because they can’t work their other jobs these days. Yet they still remain dedicated to the project. The workers and future inhabitants of Villa Soleada represent approximately half of the population of Siete de Abril. The new community is an opportunity for a brighter future for the families who are used to life in squatter’s village. For us it is an opportunity to learn how environmental factors will change the health needs of the community.
Villa Soleada

Many women have to bring their kids to the worksite so they aren’t left at home alone.

Food at Villa is made by the cooks Pastora or Sandra or you can always buy delicious empanadas from Yolanda!
Las Brisas de Libertad

- Las Brisas de Libertad is the most geographically related community to Villa Soleada. Located between the new housing project and the highway, it represents an important comparison community because of its similar demographics yet apparently higher health status.

- It is clearly economically more diverse than either Siete de Abril or Monte de Olivios, however our sample shows that many members of the community live in similar economic conditions.

- Interesting comparisons between this and the other communities shows a statistically significant higher level of education and lower level self reported health problems.
Monte de Olivios

- Monte de Olivios is another squatter’s village, located within the limits of El Progreso. It is demographically comparable to Siete de Abril and Las Brisas de Libertad.
- The community was kicked off their original land to make way for a USAID oxidation plant. The police came and bulldozed over their houses. Now they live on a scrap of land between two swamps.
- The houses are all on constructed “on top of each other” in a manner that makes it particularly vulnerable to the spread of contagious disease.
- They call the water in the swamps "agua negra" b/c basically all the sewers from El Progreso dump into the water. The community members blame the recent outbreak of Dengue in the camp on the presence of the agua negra.
“We want a place to live...a dignified place we can call home”

I’m depressed because of the situation in which we live”

“I’ve been depressed most on these most recent times, because we see that there is nothing for us”

“Everyone is sick here... You need to help us because no one comes here to help...”

-responses to epidemiology and ethnographic surveys, Monte de Olivios
Health Resources Visited

• Centro de Saluds (Health Centers)
• Local Public Hospitals (El Progreso, La Cieba)
• Nutrition Center
• Private Clinics (Los Angeles, Christian)
• Cancer Hospital (San Pedro Sula)
• Salud Total (Total Health; La Cieba)
• Orphanages: Copprome (El Progreso), Montaña de Luz (Tegucigalpa)*.

*Not discussed.
The Health Situation
El Hospital de Progreso

• Biggest health problems in adults:
  – diabetes
  – respiratory problems
  – hypertension
  – gastritis
  – cardiopathologies: stroke, heart attacks

• estimate that 5-10% of population is HIV+ and don’t know it

• Biggest health problems in children:
  – respiratory problems
  – diarrhea
  – malnutrition and obesity

• Services provided: Peds, Internal Medicine, Ob/Gyn, Surgery
• Less than 200 beds, need twice as many!
• 1-2 nurses and 1 doctor for every 12 patients!
• Lack diagnostic tests and beds!
• Diabetes Clinic w/ 3000 patients but no endocrinology despite large burden of diabetes
“My daughter died because we didn’t have enough money to pay the hospital...”

-response to ethnographic survey, Siete de Abril
Centro De Salud

- Serves 82,000 people; 10,000 are under age 5
- Price: 5 lempiras (26 cents) for meds + consult
- 3 doctors: each sees 39 px/day (no pediatricians)
- Nurses end up doing much more work than normally should be required.
- Some areas have only 1 nurse to 15,000 people!
- Vaccination program is well established!
Centro de Salud

• Lack diagnostic tests: only have tests for TB, malaria, HIV and parasitology

• Lack Medications! Only supplied with 20% of required meds.

• Meds available are limited to: antacids, acetaminophen, antibiotics, antiparasitics, meds for TB and STIs.

• No medications for HTN, diabetes, asthma, epilepsy, CNS disorders, or fungal creams which are highly needed
Children are referred to the center via judges or doctors at health centers.
All children are kept until health problems are completely restored as determined by a doctor (usually 4-6 months)
The mother or father of the child is expected to come in to help with the care of their child to learn how to provide proper nutrition at least once a week. Unfortunately sometimes the children get left there and then end up in orphanages such as Copprome.

Statistics for El Progreso provided by the Centro de Nutrición:
• Women average 4 pregnancies, but those with no education average 12
• Infant mortality: 42/1000
• 50% of kids suffer malnutrition
• 25% suffer severe malnutrition
La Liga Contra el Cancer: Non-Profit Cancer Hospital

This was a tumor the size of a baby removed from the abdomen of a woman the day we visited.

- Cervical, breast and gastric cancers are the most common cancers treated at the Hospital.
- Cancer presents in late stages b/c of lack of resources. They see 5000 cancer patients annually and most are in stages 3 and 4.
- Cytology is offered in all parts of Honduras but public treatment is available only in Tegucigalpa and San Pedro Sula.
La Cieba Health: Salud Total

- Salud Total was created by Dr. Jay Martin, a physician from Columbus following his work with medical brigades in La Cieba.
- The clinic sees 30-35 patients per day or approximately 12,000 consults a year. The total cost of operating the clinic for a year is in the range of 50,000.
- It costs 20 lempiras ($1.06) for any type of appointment, however those who cannot pay are never turned away.
- Offers programs for pre- and post-natal control, family planning, control of child development and control of chronic condition.
- Salud Total also has developed a nutrition center for sponsored children to receive one meal a day and help with school work.
Local Hospital en Cieba

• **Overcrowding is common** with 3 people to a bed in the ER or 2 mothers and babies in the maternity ward.
  – Sometimes people wait days to be seen in the ER.
• The hospital has 4 Operating Rooms but **only one is functional**.
• The hospital has **no ventilators** so everything is done manually.
“We can’t go to the health centers/hospitals when the doctors go on strike...”

-response to ethnographic survey, Siete de Abril
Surveys

- Many of our surveys were done in Villa Soleada as it offered a private setting.
- Other surveys with less sensitive information were completed in homes.
- Before each survey, each participant was read his/her rights regarding the survey and allowed the opportunity to decline any question.
- After the survey, we had a small gift in appreciation of their time including: toothbrushes and toothpaste; first aid-kits; and soap and shampoo kits.
Women’s Health Survey

- 23 surveys completed.
- Women with 3rd grade or less education have twice as many children on average than women with above 3rd grade education.
- There is no real correlation between education and income.

The majority of women who reported using birth control had used female sterilization, however the majority of women said they would use the pill or injection if they could.
“I would have liked to have learned how to read, but now there is no time for that...having children ruins your life”.

“I’ve raised myself like a little animal on the street...”

“I want to cry because I’m shut up all alone and no one will talk to me”

-responses to Women’s survey, Siete de Abril
Women’s Health Survey

- The average women gives birth 5 times
- Average age of first pregnancy is 17 but the mode and median are 16
- When asked, women reported that the appropriate age to begin sexual relations was 19 years old, 2 years older than the average age at first conception.
Epidemiology Survey

- 41 in person interviews completed, with self reported health data focusing on mental health, dental, vision, respiratory, diarrheal, nutritional, and preventative health.
- Health status was quantified for individuals and households by totaling the number of health problems respondents reported for themselves and their families.
- Data allows comparisons of health by sex, age, income, marital status, location, and preventative behaviors.
• While income (especially the mother’s reported income) and education (especially mother’s education) appear to be minor predictors of family health, location was the most statistically significant predictor of health, with respondents in Las Brisas reporting significantly better family health than either Siete or Monte.

• For the prevention of childhood diarrhea, parental reporting that the child learned about health and nutrition in school beat both prophylactic parasite medication usage and appropriate purification of water as a protective factor.
When asked if they could add any service to their community, 52% indicated that they wanted some type of health care.

52% also indicated that at some point during the year, medical services were not available.

“I try to prevent illness by avoiding the sewage, but poverty forces us to walk in trash”
Health Screenings

As part of our survey’s we offered glucose tests and blood pressure tests. We offered advice about the importance of nutrition to your health and feasible changes that participants could make.

We took weights and heights of many of the children to determine BMIs to measure malnutrition.
“What did your child eat for dinner last night?”

“a glass of coke”

“salcita”— “a little salt”

-responses to epidemiology survey, Monte de Olivios, Siete de Abril
This graph represents a snap shot of height for age for girls we screened in the three communities. While the graph is based on CDC estimates which may limit their generalizability, it is striking to note that only 4 of the 33 girls represented on this graph, fall above the 50th percentile, while 15, 45%, fall below the 5th percentile.
Education

• At one of the Saturday meetings we held a discussion about nutrition with a live food pyramid!
• We used the foods commonly eaten including tortillas, rice, beans and chicken, and then added some vegetables and fruit.
• As part of the project we priced everything at the grocery store to offer suggestions such as to purchase 10 bananas instead of a bottle of pop.
• When we totaled the cost of a well-balanced meal for a family of 4 the cost came to 1000 lmps ($53)-well over the mean and mode for family income.
Medical Brigades

We met two local doctors, Dr. Reyes and Dr. Galo who go on medical brigades every Sunday. We joined them for a medical brigade where we took medical histories and assisted as necessary.
Tele Progreso!

- Dr. Galo has his own television show every Tuesday night called Consejos de Salud! (Health Advice)
- He interviewed us on his TV show following our first brigade to talk about our work in Honduras!
Living in El Progreso

We stayed in a very safe apartment which had 3 different locked doors and a locked gate for safety reasons.

Near by our apartment is the market of El Progreso with lots of different stores. It was nice to run into people from Siete at the market because they were always excited to see us!
Our transportation

We worked with two brothers, Nan and Josué to transport us around to the different communities of course always on the backs of pick-ups! For safety reasons it is helpful to be accompanied by a local Honduran. They also were helpful with our surveys and research to help clarify if needed.
Colorful
El Progreso
We hope you join us in our efforts in Honduras!
Thank you for your support!

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<th>Total Cost (4 persons)</th>
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