Public Health Practice

Stories from the Field
Student Practicum Experiences
Summer 2011
The University of Texas School of Public Health
International Practicum Experiences
The practicum experience is an integral part of the MPH curriculum. Public health students are provided with the opportunity to apply their classroom knowledge to real world settings through which they make a meaningful contribution to a public health organization.

Under the guidance of a community preceptor and faculty sponsor, students from all divisions gain a deeper understanding of public health practice, interact with professionals in the field, and expand their repertoire of professional skills.

This fifth-edition e-magazine showcases student practicum experiences throughout the Summer 2011 semester. (Prior semesters may be accessed through the e-book, a collection of student abstracts and e-magazines describing their experiences.)
## Practicum Topics

Serving Size: 1 Practicum per Student  
Servings per e-Magazine: 27

<table>
<thead>
<tr>
<th>Continents</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Countries</td>
<td>18</td>
</tr>
</tbody>
</table>

### International Practicum Experiences

#### ASIA
- **China**: Neurocysticercosis  
  - Cary Cain
- **India**: Malaria  
  - Lindsay McBride
- **Lebanon**: Women’s Health  
  - Zeina Jamaleddine
- **Pakistan**: HCV Risk Factors  
  - Emily VerHoeve
- **Philippines**: Program Evaluation  
  - Noah Strohacker

#### AFRICA
- **Ethiopia**: Water, Sanitation & Hygiene  
  - Adam Dunstone
- **Ghana**: HIV  
  - Rebecca Poku
- **Kenya**: PEPFAR  
  - Stephanie Meyer
- **South Africa**: HIV/AIDS  
  - Kathryn Kimbrough
- **Tanzania**: Mapping Dar Es Salaam  
  - Haruka Maruyama
- **Uganda**: Solar Power  
  - Katherine Meese
- **Uganda**: HIV Testing Needs Assessment  
  - Sha’Tia Safford
- **Uganda**: Clean Birth Kit Distribution  
  - Monika Tomczuk

#### EUROPE
- **Switzerland**: WHO Internship  
  - Jose Medina

#### NORTH AMERICA
- **Dominican Republic**: Water, Sanitation & Hygiene (WASH) Survey  
  - Natalie Cobb
- **Dominican Republic**: Water, Sanitation & Hygiene  
  - Christine Cortelyou
- **Dominican Republic**: HIV  
  - Zacharia Varghese
- **Guatemala**: Cervical Cancer Prevention  
  - Sarah Schwaller
<table>
<thead>
<tr>
<th>Location</th>
<th>Topic</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honduras</td>
<td>Promotoras in Roatán</td>
<td>Ryan Arnold</td>
</tr>
<tr>
<td>Honduras</td>
<td>Teen Pregnancy &amp; STIs</td>
<td>Julia Fleckman</td>
</tr>
<tr>
<td>Honduras</td>
<td>Promotoras in Roatán</td>
<td>Krista Granger</td>
</tr>
<tr>
<td>Honduras</td>
<td>Promotoras in Roatán</td>
<td>Angie Lloyd</td>
</tr>
<tr>
<td>Honduras</td>
<td>Rural Health with Shoulder to Shoulder</td>
<td>Zuhair Siddique</td>
</tr>
<tr>
<td>Honduras</td>
<td>Promotoras in Roatán</td>
<td>Alex Zottarelli</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>Dengue Among Infants</td>
<td>Anne Hause</td>
</tr>
<tr>
<td><strong>SOUTH AMERICA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>ART Adherence</td>
<td>Vanessa Martucci</td>
</tr>
<tr>
<td>Ecuador</td>
<td>Infectious Disease</td>
<td>Heather Murray</td>
</tr>
</tbody>
</table>
Neurocysticercosis in China

Breaking the cycle of disease among the Bai ethnic group
By: CARY CAIN

I spent my summer in Eryuan County of Dali Prefecture, which is a beautiful mountainous region at the foothills of the Himalayas in Southwest China. Eryuan County is home to approximately 300,000 people, the majority of which are of the Bai ethnic minority group.

I joined a team of Public Health professionals from Oklahoma International Initiative (Okii) NGO in partnership with the China National and Dali Institutes of Parasitic Diseases and the Eryuan Station for Parasitic Diseases on a community-based project to prevent the cycle of disease of Neurocysticercosis (NCC) among the Bai people.

Okii is conducting a 3-year pilot study of social marketing of household toilets in two intervention villages in Eryuan.

I participated in the project implementation through assistance with baseline data collection; porcine blood samples to determine porcine prevalence of disease and assistance in translation for data entry of a cross-sectional door-to-door survey to estimate the baseline prevalence of NCC-associated epilepsy, presence of household toilets, and habits of eating raw pork. I assisted with project evaluation by contributing a logic model of the project.

Public Health Significance
Neurocysticercosis (NCC) is a public health concern in developing areas of the world because it is considered to be one of the leading causes of epilepsy. The causal agent of NCC is the Taenia solium tapeworm (Figure 1). 1 A study conducted in Eryuan County in 2007 reported a human seroprevalence of 18.8% to antibodies of cysticercosis. 2 Breaking the cycle of disease involves strategies that prevent infected human feces from entering the environment through subsequent ingestion by pigs and humans. The practice of eating raw pork is an important part of Bai culture and so it is difficult to break the cycle of the tapeworm through prevention of eating raw pork. Through the social marketing campaign, Okii aims to increase proper use of household toilets among the Bai to break the cycle of the T. solium tapeworm, thus preventing the spread of the disease. The work of this 3-year project covers a number of Essential Services of Public Health. The aim of this project is to “inform, educate and empower people about health issues” and to “mobilize community partnerships to identify and solve health problems” through the social marketing campaign of household toilets.

Prevention and Treatment of Malaria

Observations on the Prevention and Treatment of Malaria in Coastal Mumbai.

For my practicum experience I travelled to Mumbai, India with the NGO, Child and Family Health International, to participate in a program focusing on tropical infectious diseases. The program provided the opportunity to participate in community healthcare services through visits to local clinics as well as large government hospitals and gain first-hand clinical exposure to various infectious diseases such as TB, dengue fever, leprosy, and malaria. The incidence and prevalence rates of malaria in Mumbai are quite significant, particularly during the monsoon season. Therefore, I chose to focus on my research/observations on malaria specifically the methods being used by healthcare professionals to prevent and treat malaria and create a report based on those observations and supplemental research.

“Two days with fever it’s viral, three days with fever it’s malaria” – Dr. Potnis, physician in charge of a clinic in east Mumbai.

Public Health Significance

Due to limited resources and large patient numbers, the physicians who ran the local clinics were fully responsible for ensuring that the essential services of public health were being met. All of the physicians provided patients with the best available care regardless of ability to pay, educated them about disease and hygiene and if needed helped them locate additional medical services.

My practicum experience primarily involved evaluating current prevention and treatment methods being used by physicians throughout Mumbai for effectiveness and quality. Malaria is both curable and preventable; however morbidity remains high and the incidence of drug-resistant malaria continues to increase. Only through the evaluation of current treatment/control methods can new and more effective ones be developed.
The final product created for my practicum was a report for Hesperian about the two chapters I was asked to test, especially the activities they contained. Overall, the chapters were relevant and the activities went well, although some changes were recommended.

Activity testing from the Safe Motherhood and Family Planning Chapters
- Activities were translated and prepared the day before
- Beneficiaries from PWHO’s services participated and enjoyed the activities

Public Health Significance
My practicum experience mostly enabled me to perform the “inform, educate, and empower” service listed in the American Public Health Association list of 10 Essential Health Services.

The activities in the chapters I was sent to field test were designed to provoke discussion about several essential topics concerning Family Planning and Safe Motherhood. Through these discussions, participants were able to voice their concerns, and learn about ways to change them as well as gain information about valuable topics.

Examples of topics that were addressed in these activities are the benefit of having a small family versus a large one, as well as different methods to use family planning and ways to insure safe pregnancies and delivery. Ways to make family planning and safe motherhood more available were also addressed.
Risk Factors for Hepatitis C in Karachi, Pakistan

By: Emily Ver Hoeve

During summer 2011, I had the privilege of helping to start a Hepatitis C (HCV) case control study at Indus Hospital in Karachi, Pakistan. This study focuses on identifying the main risk factors in the hospital’s catchment population and characterizing clinical symptoms of current treatments.

Our approach consisted of administering a risk factor questionnaire and performing a retrospective medical record abstraction. We also collected blood specimens for each patient for further genetic analyses.

When my time is finished in Karachi, the HCV study will continue until 600 participants are enrolled. From our analysis so far, we found that therapeutic injections are the main risk factor for this population. Most patients are also experiencing fever and fatigue from current treatments.

Living in Karachi

The main highlight of this experience was getting to live and work in a completely different environment. Not only have I gained a wealth of knowledge on how to coordinate a study, I have also learned that Pakistani’s are the most hospitable people you will ever meet.

Public Health Significance

My practicum experience demonstrates public health significance by providing 4 of the 10 Essential Public Health Services. The HCV study monitors the health status to identify community problems dealing with HCV. This study also informs and educates people about what causes HCV transmission and links them to proper physician care. Additionally, using the information gleaned from this study, researchers can develop new treatments better suited to genotype 3 and interventions for preventing HCV transmission.

IRD, Interactive Research and Development, contributes to public health by creating community cohorts to investigate non communicable disease, multi-drug tuberculosis, and now hepatitis C. Since its establishment in 2007, IRD has worked to create new and innovative studies in the developing world. IRD has many sound partnerships with organizations such as Johns Hopkins and the World Health Organization allowing them to get the guidance and support they need to operate in the developing world.

The clinic area is full Monday through Saturday. The nine general practitioners see on average 40 patients.

“Working at Indus Hospital has been one of the most rewarding experiences of my life.”

http://indushospital.org.pk/
Public Health Significance

Research in any field is only as good as the data that informs it. Maintaining a current database and considering the way data is collected ensures that GRC will have accurate data to analyze. Having this information allows GRC to evaluate their programs and monitor women’s health in the communities they serve. If certain trends are found it can lead to better diagnosis that is translated to public health outreach aimed at education.

GRC has already identified a community in Cebu City that has a much higher maternal mortality rate than other areas. Their efforts have led to healthcare access for those that would otherwise never have it and create a family among staff and patients where hope is instilled.

Evaluating the impact of free maternal care in the Philippines

By: Noah Strohacker

For the last seven years Glory Reborn Clinic (GRC), located in Cebu City, Philippines, has been serving the poorest of the poor with free care during and after pregnancy. As GRC expanded from a single apartment to an entire building, so have their needs in managing patient data. Although their database is technologically ahead of the public health sector, there is always room for improvement that will lead to accurate data collection and improved patient care. My first task was to get the database current and through that I was able to evaluate what improvements were needed to their system, both digital and hand written charts. The result was a report outlining improvements that can be made as well as a reminder to staff of the importance of accurate and thorough charting in order to have usable data.

Highlights

- June Baby Party
  Cake, Clothes, and Vaccines!
- Program Evaluation
- Analyzing data that will be used to have a lasting impact across multiple communities

“Research in any field is only as good as the data that informs it.”
Water Sanitation & Hygiene in Aleta Wondo

Water Sanitation & Hygiene Survey Findings
By: ADAM DUNSTONE

In order to gauge the quality of water used in the Aleta Wondo area and the level of hygiene in the homes, our team conducted an interview survey at over 50 different homes. The survey also includes a detailed “Observations” section which we completed after touring the premises with members of the interviewed household.

We found that there were several reliable sources of relatively clean water available to the region’s residents. The prevalence of water-borne illnesses such as cholera appeared to be low. Furthermore, 100% of respondents knew how to obtain Oral Rehydration Solution. Most of the interviewees also had a basic understanding of disease transmission and how to prevent the spread of bacteria/worms.

Public Health Significance

The goal of our project was to build knowledge and collect data about the area’s water and hygiene with the aim of mobilizing the community to make tangible improvements in the future. Future groups of students will continue this research and begin to develop outreach programs based on the data and observations we have made.

Common River, an NGO based out of California, hosted our team and contributes to the region’s public health by offering 1st to 3rd grade education to over 100 orphaned kids. As students, these children also receive donated clothing and nutritious meals to enhance their learning ability.

Education is the key to improving these inhabitants’ standard of living. Improving our understanding of the region’s hygiene habits and access to clean water will eventually allow us to make carefully directed public health interventions.

Photos courtesy of: Adam Dunstone

Despite drought in much of the Horn of Africa, water sources such as the one pictured below lack a simple valve to stem the flow of water; hundreds of gallons of potable water are wasted every day.
Public Health Significance

One Essential Service of Public Health that relates to my practicum experience is to “diagnose and investigate health problems and hazards in the community.”

The results of the survey highlight several social issues that can affect the health of people living with HIV (PLHIV) and their families. For example, the survey results indicate that compared to previous reports, married PLHIV are disclosing their HIV status to their spouses more quickly. However, PLHIV continue to be very hesitant to disclose their status to more than 1 or 2 family members; this may indicate that more work is needed to reduce discriminatory attitudes among community members. Increases in HIV treatment seeking, HIV prevention behaviors, and community cohesion could result from decreases in HIV stigma.

The mission of ISSER includes both teaching and researching topics and skills that are critical in Ghana’s development and the socio-economic wellbeing of the people. As health is affected by the economic and social situations of a country, the work of ISSER contributes to public health in Ghana.

HIV issues in Ghana: stigma, discrimination, and the economic impact on families

By: Rebecca Poku

During my practicum, I worked at the Institute for Statistical, Social and Economic Research (ISSER) at the University of Ghana in Accra.

The project I worked on was a cross-sectional survey conducted among people living with HIV in various areas of Ghana. The interviews were conducted before my arrival in Ghana; my job was to assist the researchers with analyzing the data and developing manuscripts to publish their findings. My final products were a draft of one manuscript and two abstracts that were submitted for an upcoming conference.

The manuscript draft that was completed covered the findings pertaining to HIV-related stigma and discrimination in Ghana. The data from the study will be further analyzed to investigate the economic impact of HIV on households in Ghana.

“People living with HIV are just like you”

- Final sentence of a current anti-stigma message stated in TV, radio, and billboard messages in Ghana

ISSER emblem on a mug that was used a lot during my practicum...hence the slight fading of the emblem!
PEPFAR in Kisumu West District, Kisumu Kenya

By: Stephanie Meyer

Kisumu, Kenya is in Nyanza Province. HIV prevalence is 15%, and stunting and wasting are 43.9% and 5.4% respectively for children under 5 years.

The President’s Emergency Plan for Aids Relief (PEPFAR) and the Ministry of Health (MoH) provide resources for HIV testing, counseling and treatment. The Walter Reed Project (WRP) is the conduit for local PEPFAR support. Treatment includes nutrition education and supplementation for the malnourished via the Food-By Prescription (FBP) program.

The effect of the (FBP) program in children 6 months to 5 years has not been evaluated in Kenya; an evaluation is needed and developing a proposal to do this was my project. Food insecurity is prevalent in the area, so knowing the effects of FBP will inform program administration in the future.

Public Health Significance

Linking people to services through the use of community health workers; informing, educating and empowering the population about HIV prevention, testing and treatment; and evaluating the effectiveness of programs are all pertinent to PEPFAR and the population it serves.

Over 28 community health workers (CHWs) are trained to provide testing in the field, particularly for women who are pregnant; home-based treatment and counseling is also provided; all CHWs refer clients to the next level of care as needed. Education related to HIV prevention, testing and treatment is provided through CHWs, the media, and medical facilities.

Finally, monitoring and evaluation of process indicators occurs regularly; an evaluation of the outcomes of the FBP is forthcoming.

The Walter Reed Project is working to build local capacity and sustainable health improvements through research and education and training for local healthcare and research support staff.

Special events/duties during your practicum

- 12 July Ward Rounds at Obama Children’s Hospital
- 14 July Innovations for Poverty Action Conference
- 1 August Meeting with Family Health Initiative Staff, Nairobi

“30% of children less than 5 years who are seen at the Comprehensive Care Clinic are malnourished.”
Public Health Significance

During my practicum experience, the significant health problems of the local community were introduced. As a group, we discussed contributing factors and current policies and interventions in place to respond to these health issues.

Of the 10 Essential Public Health Services, the two that most closely relate to my practicum experience are:

- **Inform, educate, and empower** people about health issues.
- **Link** people to needed personal health services and assure the provision of health care when otherwise unavailable.

Prevention of mother-to-child transmission of HIV/AIDS involves the education of both mother and community. Mothers have free access to healthcare services, including ARV therapy. They receive education in several areas, including the risk of mixed feeds. Formula is provided to mothers that chose not to breastfeed. HIV-RNA testing of the infant is performed at 6 weeks.

HIV/AIDS Epidemic & Healthcare in post-apartheid South Africa

**By: Katie Kimbrough**

Child Family Health International (cfhi) is an NGO that collaborates with international sites to develop global health education programs for health science students.

The HIV/AIDS & Healthcare program is held in the KwaZulu-Natal province, the area most devastated by the HIV/AIDS epidemic. Program participants learn about the struggle of South African healthcare system to overcome social inequalities left by apartheid and compounded by the HIV/AIDS epidemic.

To understand the stratified structure of the district health system, participants rotate through the different levels of care, beginning with primary health clinics and progressing to district, regional, and tertiary hospitals.

Participants educate the community on HIV prevention. My area of focus was the prevention of mother-to-child transmission. My final project was an oral presentation on preventive practices during both the pre- and post-natal period.

Weekend Activities

- Go on Safari at Hluhluwe Umfolozi Game Reserve
- Take a Hippo & Croc Boat Cruise on St. Lucia Estuary
- Visit the KwaZulu-Natal Sharks Board and watch a shark dissection live.
- Hike the Drakensburg Mountains

“In the KwaZulu-Natal Province, the HIV prevalence among antenatal clinic attendees is estimated at 39.5%.”

Photos courtesy of Katie Kimbrough
Public Health Significance

My practicum activity related to the essential services of doing research for new insights to health problems and investigating health hazards. We wanted to find out how the heroin using scene has changed since the last time mapping was conducted several years ago. We found new hangout sites in districts which were not mapped previously, and sought to find any new phenomena that are occurring that related to heroin use in Dar es Salaam. These included types of drugs used, numbers of drug users, types of hangouts utilized, and group and individual dynamics and behaviors.

TAPP is a program that encompasses all of the essential services of public health, and some examples include:

- Linking injecting drug users to methadone treatment and other health services
- Mobilizing partnerships with community-based and non-governmental organizations
- Training and monitoring outreach workers
- Educating people on issues such as HIV/AIDS and testing services

Mapping and interviewing heroin users in Dar es Salaam, Tanzania

By: HARUKA MARUYAMA

I was in Dar es Salaam this summer as part of the Tanzania AIDS Prevention Program (TAPP). TAPP is a multi-arm program that seeks to help injecting drug users (IDUs) in Dar es Salaam. Some examples of what they do include: collecting and assessing health data on IDUs, connecting users to health services (such as mobile VCT services and a newly opened methadone clinic), and conducting community education programs in HIV/AIDS prevention and other harm reduction activities.

My practicum involved using a GPS device to map sites where heroin use occurred in all three districts of Dar es Salaam. Additionally, my colleagues and I interviewed groups of drug users at the sites to learn more about their lives, experiences, and needs.

The purpose of this mapping activity was to find out where the hangout locations were and know more about current users’ experiences, so we can develop and integrate interventions in the future. My findings were presented in a final report and data table.

Highlights/Results

- Met numerous recovering heroin addicts who were in the methadone program and proudly showing us their ID badges
- Mapped a total of 106 locations over a five week period
- Met a total of over 850 drug users at the mapped sites, out of which 59 stated they were injectors

“We want to quit using and we need help.”

-Every drug user we talked to

Standing next to a TAPP vehicle, ready to go mapping!
Delivery in Darkness: Solar Power Opportunities in Rural Uganda

By: Katherine Meese

I worked with a maternal and child health organization called SAFE Mothers Safe Babies (SAFE) to address health issues in the Iganga District, Uganda. I worked specifically on an electricity needs assessment for health centers and hospitals, and a solar power implementation. SAFE was able to secure funding for solar powered generators and lighting from a US-based company. I chose the health facilities for placement of the solar equipment. I was also responsible for drafting and signing Memorandums of Understanding with the recipient health centers and creating appropriate methods to capture data that will be used to monitor program success. We were also able to sign a leasing agreement for the solar equipment for one hospital that will generate enough revenue to sustain our motorcycle ambulance program.

Solar Solutions for Rural Uganda

I worked with a maternal and child health organization called Safe Mothers Safe Babies (SAFE) to address health issues in the Iganga District, Uganda. I worked specifically on an electricity needs assessment for health centers and hospitals, and a solar power implementation. SAFE was able to secure funding for solar powered generators and lighting from a US-based company. I chose the health facilities for placement of the solar equipment. I was also responsible for drafting and signing Memorandums of Understanding with the recipient health centers and creating appropriate methods to capture data that will be used to monitor program success. We were also able to sign a leasing agreement for the solar equipment for one hospital that will generate enough revenue to sustain our motorcycle ambulance program.

Public Health Significance

My practicum experience primarily focused on diagnosing and investigating a current health hazard. When a health facility does not have reliable electricity, the impact on health can be substantial. Blood bank refrigeration, vaccine refrigeration, microscope use, and equipment sterilization with an autoclave becomes impossible. In addition, inadequate lighting causes significant problems. Deliveries and c-sections are often done by the light of a kerosene lamp or a headlamp. Routine tasks such as stopping bleeding or inserting an IV become nearly impossible in dim lighting conditions.

Electricity via the grid is expensive at best and unreliable. Power outages between 30 minutes and 3 hours are common almost daily. Due to the high cost of fuel, running diesel generators for backup is no longer an option.

Solar power provided a reliable and inexpensive alternative to the electricity crisis in Uganda.

“Electricity here is so expensive and unreliable. Solar is the only solution. Our only problem is the funding.”
— Sulaiman Lule, Ibulanku Community Health Center

Safe Mother Safe Babies

- Surveyed regional health facilities and hospitals for electricity needs
- Worked with local health centers and community leaders to help implement motorcycle ambulance program
- Created income generating model for solar panels to support motorcycle ambulance program and other MCH projects

Kerosene lamps used for delivery at Ibulanku Health Center when there is no electricity Source: Katherine Meese

Operating Theater at Iganga District Hospital. Electricity goes out almost every night, and c-sections are conducted by kerosene lamp. Source: Katherine Meese
HIV Testing Needs Assessments to PMTCT in Iganga District, Uganda

By: Sha’Tia Safford

During my practicum, I traveled to Iganga District, Uganda to volunteer for a non-profit organization called Safe Mothers, Safe Babies. My practicum began on July 19th and will conclude on August 20th. Safe Mothers, Safe Babies’ main objective is to reduce maternal mortality in the Kalulu area in Uganda. During my practicum, I was able to conduct 30 home to home visits with local women asking questions regarding HIV testing during recent antenatal care visits. I also spoke with the two health centers (HCs) that the women would be attending, and spoke to local advocacy groups concerned with Prevention of Mother to Child transmission (PMTCT) of HIV. At the conclusion of my practicum, I will create a report of the ramifications associated with not HIV testing pregnant women before birth in an environment where the HIV incidence and prevalence is very high. Safe Mothers, Safe Babies will use this report to find ways to advocate for the people in Kalulu to inform the government that they need to send more supplies to the rural village HCs to PMTCT of HIV. My results showed that the government-run hospitals and HC centers lack the supplies needed to administer HIV tests; therefore, contributing to an increase in the cases of mother to child transmission of HIV and an increase in the mortality of infants. The Ugandan government needs to provide HIV testing for mothers during antenatal visits if it is a requirement by law that women be HIV tested if they attend antenatal visits.

“Every mother in Uganda by law attending antenatal visits should be tested for HIV and know their status.”

Public Health Significance

The core essential of public health that I feel like I needed to use to carry out my practicum was mobilizing the community. For example, in order to actually conduct home to home visits, I had to ask the community if they felt comfortable with me asking them personal questions concerning their HIV testing and antenatal visits information. I also had to mobilize the community to allow me to also go into their health centers to ask questions concerning way they were treated a certain way or not given HIV testing during antenatal visits. Mobilizing the community allowed me to get access to some of their most valued figures within their community to begin to think about how Safe Mothers, Safe Babies can help them figure out how to improve their HCs so they can get the proper treatment.
Clean Births in Uganda

Promotion and Distribution of Safe Mama Kits in Iganga District

By: Monika Tomczuk

Safe Mothers, Safe Babies (SAFE) is an organization working in Uganda to educate and mobilize the communities in Iganga District to be proactive about health issues in the area, particularly maternal and child health. SAFE received a grant to provide Safe Mama Kits to the area. Safe Mama Kits consist of supplies that help women have clean deliveries in low resource areas.

Working with SAFE, I developed a path plan for distributing the kits in the area.

Public Health Significance

My practicum with Safe Mothers, Safe Babies focused on the public health essential services of informing, educating and empowering people about health issues and mobilizing community partnerships to solve health problems. While in Uganda, we held events and home-to-home visits to inform people about Safe Mama Kits and the importance of clean delivery practices to reduce infections. We also continued to develop partnerships with the two health centers that will distribute the kits, as well as mobilize one of the community groups to create cheaper kits that they could sell in the future in the area. Safe Mothers, Safe Babies recognizes the importance of involving the community members in any health projects that they initiate in the community as SAFE wants them to be able to take over the projects in the future.

"Be the facilitator, not the doer" - Erin Glueckert
What was the final product you created for your practicum site?

I created a “rapid review” regarding active school transport interventions. However, due to a standard confidentiality agreement, I am unable to share the findings.

Special events during practicum:

- I attended the 64th World Health Assembly, which is the most important health-related meeting in the world. It sets the agenda for the WHO for the following year. (Picture on the left)

Public Health Significance

The significance of my public health internship related to several of the 10 Essential Public Health Services. My department is part of the Unit of Surveillance and Population-Based Prevention, so part of my job was to monitor trends on the evidence of physical activity interventions. I researched the literature to inform future guidelines and recommendations made by the WHO on physical activity. By being the premier health-related organization in the world, I think my tiny contribution to the work of the WHO may have a greater impact. The final product will be disseminated, eventually, to 193 member states around the world. And that is pretty cool!

“IT was terrific to commute to WHO and pass by the United Nations everyday.”

Broken Chair sculpture in front of the United Nations. It symbolizes opposition to land mines.

Photography by José Medina
Evaluating Water, Sanitation and Hygiene Practices

By: Natalie Cobb

During my practicum, I had the opportunity to work on a survey conducted in Batey Altagracia, Dominican Republic in collaboration with the University of Texas Health Science Center at San Antonio. The survey was comprised of 74 questions and 32 observations designed to investigate water, sanitation, and hygiene (WASH) practices within the community.

We surveyed a total of 88 houses using a modified cluster random sampling method and conducted the survey in Spanish and Creole.

Since returning from the Dominican Republic, we have been working on analyzing the data collected to evaluate the WASH needs of the community. We recently presented preliminary findings from our data at the University.

Public Health Significance

Access to clean water and sanitation facilities as well as knowledge of hygiene practices are key aspects of building and maintaining good health in any community.

Through conducting a baseline survey in Batey Altagracia, the Dominican Republic team would like to gain insight into the resources and knowledge available in the community regarding WASH practices.

The long-term goal of the project is to be able to adapt and implement a WASH education program that is sustained through community-based health clubs. The program, which takes a participatory approach to health education, would serve to reduce WASH-related diarrheal and skin disease within the community.

The Center for Medical Humanities and Ethics at the University of Texas Health Science Center at San Antonio is continuing to develop the project and the necessary educational tools.
By: Christine Cortelyou

As a member of a public health team, I traveled to Batey Altagracia located near Barahona, Dominican Republic to study water sanitation and hygiene practices of the community. We collected qualitative data and conducted 88 health surveys. With the knowledge we gain from our data, we hope to modify educational tools that have previously been used in Africa to educate people about the good and bad health practices. Once the educational tools are complete, we hope to utilize the method of community based learning by organizing community health clubs that meet weekly with a facilitator to learn about good and bad health practices. With this method, we hope that a positive social pressure will encourage members to change their health practices for the better.

Public Health Significance

My practicum experience most relates to the inform, educate and empower essential public health service. It is through the community health clubs and the educational tools that we hope to educate community members about health issues. With this type of participatory learning, we desire to empower individuals so that they not only learn about specific health topics but also gain a problem-solving skills set so that they may work to alleviate other health problems in the community. For example, by teaching community members about how clean water can decrease the prevalence of diarrheal diseases, we hope that they will begin to find ways to secure clean water in their homes. Additionally, we hope that they look further into the issue and identify how contamination of water sources can be avoided. It is through education, problem-solving, and group participation that the prevalence of diarrheal diseases can be reduced.

“Water is fundamental for life and health. The human right to water is indispensable for leading a healthy life in human dignity. It is a pre-requisite to the realization of all human rights.”

The United Nations Committee on Economic, Cultural and Social Rights
Public Health Significance

Two essential public health functions we participated in were creating links and evaluation. The core purpose of our project was to generate awareness for the mission’s AIDS programs and to evaluate if current campaigns were effective in a mixed population.

By designing and executing a protocol that engaged the target audience, we were able to show that the majority of the respondents knew about HIV and knew about clinic sites, but that there were significant information gaps.

For example, we found that while locals knew where a clinic was, they may not know that free medication was available, or that testing was relatively inexpensive. Transportation was an issue for some. As we spoke with individuals, we were able to educate them about the spectrum of service, which seemed to be appreciated.

Perhaps more importantly, we gained ready access to our town’s mayor, regional health director, and bishop – all important players in future work.

Deploying a Pilot Community Health Survey in the Dominican Republic

By: Zacharia Poycattle Varghese, MD

Working in partnership with a Syriac Orthodox mission, I led a team to Puerta Plata, Dominican Republic to systematically survey local adults within proximity of various HIV clinics. We wanted to know about HIV and clinic awareness, utilization, access, services rendered, and attitudes toward AIDS.

I designed a protocol, assembled a team, organized travel, and coordinated the project in field. We overcame several logistical challenges and gained practical experience about operating in a foreign culture, revising protocols in real time, employing translators, and utilizing technology. We also deployed statistical methods for data analysis.

We generated a final report and kept field journals about the country’s public health needs. Given some now wide open doors, we hope to return for a full blown survey as well as other projects.

Special Events:

- Visited several Haitian ghettos, delivering supplies
- Visited a school in Haiti providing nutritional support to 50 students
- Tour ed an orphanage housing mentally challenged children literally pulled from garbage dumpsters.

“In service to the poor, it is often enough to simply be available”
- Fr. Dale Johnson
  Director
  Dominican Outreach

Summer 2011 • Zacharia P Varghese • Dominican Outreach, Dominican Republic • Community AIDS Survey
Cervical Cancer Prevention

Public Health Significance

My practicum experience aligns with the Public Health Essential Service to evaluate effectiveness, accessibility, and quality of personal and population-based health services.

The findings from my project highlight both successful program aspects as well as areas of improvement.

The National Cervical Cancer Prevention Program has a significant impact on public health. They set policies, implement prevention and control activities, train practitioners and supervise activities within the regional health departments. They were recently acknowledged by the Pan American Health Organization for their efforts and chosen to host a regional conference on cervical cancer. Their most recent strategy includes expanding country-wide trainings for practitioners in VIA, a low-tech alternative to the Pap Test. This methodology has proved to be very effective, especially in low-resource settings.

Practicum Highlights

- Learning from Guatemalan health practitioners
- Conducting site visits in different regions of the country
- Understanding patient and practitioner perspectives on a range of topics relevant to HPV and cervical cancer through observation and interviews

"Cervical cancer mortality rates are seven times greater in Latin America and the Caribbean than in North America."
- PAHO
http://www.rho.org...2010.pdf

Cervical cancer prevention in Guatemala

By: Sarah Schwaller

The National Cervical Cancer Prevention Program is one of the most active divisions within the Guatemalan Ministry of Health’s Reproductive Health Program. This is due to the fact that they are in the midst of a nationwide effort to improve the capacity and quality of the cervical cancer prevention program. It was an exciting time to have the opportunity to participate in the division and learn from the director, Dr. Erick Alvarez, who is very passionate about providing effective cervical cancer prevention. My duties included monitoring the prevention program in six regions of the country. Collaborating with regional reproductive health facilitators, I evaluated seven components of the programs which ranged from the screening test itself to education and promotion.

Site visit with the colposcopy team at a local health clinic in La Democracia, a town along the Pacific Coast of Guatemala.

Visual Inspection with Acetic Acid (VIA) is a simple screening test that provides immediate results. An affordable alternative to the Pap Test, it requires few materials, which are seen above. Source:
http://www.human.comell.edu/dns/globalhealth/undergraduate/stufieldexp.cfm
Pilot Proposal for Community Health Workers in Roatan, Honduras

By: Ryan Arnold

Throughout the summer, I, along with three other students of public health at the University of Texas, volunteered with Clinica Esperanza in hopes of beginning a community health worker (CHW) network. The CHWs would be responsible for education and newborn home visits to ensure proper development.

Initially, we wanted to better understand the delivery of perinatal care on the island, and then we surveyed key informants on the needs and implementation of CHWs. We found that education was much needed on the island and many mothers missed their 7 day check-up after giving birth.

From this information, we developed a proposal for a partnership between Rotary International, Roatan Chamber of Commerce, and Clinica Esperanza to begin a pilot CHW network for the island.

“What is an island full of potential ready for any who are interested in improving the health of a rural, developing region.”

-Ryan Arnold

Public Health Significance

Our CHW network development focused on a number of essential public health services including: informing, educating, and empowering the community; mobilizing community partnerships; linking people to health services in isolated areas; and developing a plan to support the community health efforts.

Clinica Esperanza focuses on both clinical services as well as education services for the community. Likewise, a key component of our proposal is the integration of education into the CHW plan. In order for our network to materialize, we needed to mobilize resources and support from a number of key people and organizations in the community. Along with education, a goal of our plan is to link isolated people and communities with newborn health services provided by the CHW. Finally, our pilot project is the beginning of a sustainable community health effort.

In partnership with Clinica Esperanza, our proposal will provide many essential components of community health for Roatan, Honduras.
This summer, I revised and implemented a behavioral intervention based on the study "It’s Your Game, Keep It Real" currently being implemented through the UTHSC Center for Health Promotion in Houston. I revised this study to make a condensed Spanish version of the sexual health education program appropriate for Honduran seventh graders. I implemented the intervention at a public school with 95 seventh graders in La Esperanza, Honduras in the region of Intibuca.

I began with a pre-test survey at an intervention and control school to test participants’ personal sexual experience; knowledge of STIs, pregnancy and effective birth control methods; and beliefs about initiation of sexual intercourse. Following the survey, I taught eight lessons regarding respect, healthy relationships, avoiding risky situations, how to say no, and methods for avoiding pregnancy and contractions of STIs at the intervention school.

The organization I worked for, Amigos de las Americas, is a non-profit organization that focuses on community development and health education. Although this was a special project not within their normal structure, they encouraged me to focus on connecting with the students and educating them on these issues to the best of my ability. The host site, the intervention school, also encouraged me to do the same. My main duties were developing, implementing, and evaluating this intervention.

Overall, the intervention went well in the development of the curriculum and implementation of the lessons. From observation and feedback, I can see the participants gained confidence in their ability to make good choices concerning risky situations. The final evaluation is currently being implemented, along with the post-test survey, and upon analysis, results will be shared with the intervention school, control school, and host organization.
Public Health Significance

The Essential Service of Public Health that most closely relates to my practicum experience is monitoring health status to identify community health problems. My classmates and I were able to travel to different communities across the island and administer our questionnaires. From the questionnaires, we were able to identify the most prominent community health problems that promotoras can work to address.

The goal of my practicum experience is to set up a sustainable Promotora Program that will contribute to the Essential Service of Public Health of informing, educating, and empowering people about health issues.

Promotoras are an essential part of the healthcare system in Roatan. They are able to reach a wide range of community members that may not otherwise have access to health education and clinic resources. Promotoras are also linked to healthcare professionals and are able to refer community members to receive further care when necessary.

Establishing a Promotora Program with Clinica Esperanza

By: Krista Granger

Clinica Esperanza is a small clinic that makes a huge impact on the island of Roatan, where healthcare resources are limited. Public health services are even more scarce, so three other students and I were asked to set up a Promotora (aka Community Health Worker) Program that can address the public health needs of the island.

We started by conducting a needs assessment to determine the specific health needs of the island and the role of promotoras in each community.

From data collected, we found that promotoras would best serve their communities by teaching health education classes on disease prevention and treatment, water and sanitation, and maternal and child health.

Funding is an important part of sustaining the Promotora program, so a proposal was written to the local Rotary Club in hopes of receiving a grant.

Special events/duties

- Conducting a needs assessment of the types of health services a Promotora should provide
- Creating a proposal for the Promotora Program
- Administering vision screenings and distributing glasses to primary school students
- Creating a curriculum guide for volunteers teaching health education classes at Clinica Esperanza

"We cannot live for ourselves alone. Our lives are connected by a thousand invisible threads, and along these sympathetic fibers, our actions run as causes and return to us as results."

-Herman Melville

Part of the presentation my classmates and I gave on Promotoras de Salud at a Chamber of Commerce meeting
Taking the Clinic to the Community

By: Angie Lloyd

Together with three other UTSPH students, I worked through Clinica Esperanza in Roatán, Honduras this summer. Clinica Esperanza is a non-profit clinic founded by Peggy Stranges (our community preceptor) in 2006.

As public health volunteers we juggled multiple community-based projects. Our primary project was to draft a grant proposal for a promotora de salud (community health worker) program on the island. To determine health needs as perceived by the islanders, we interviewed community members, clinic workers and business leaders on the island. We presented the idea of a promotora program to the local Chamber of Commerce and Industry and the Rotary Club to gauge their interest in possibly funding such a program.

By the end of our practicum we had confirmed potential funders for the program and written a draft grant proposal, which is currently being circulated for feedback.

Public Health Significance

Our work this summer certainly touched many of the Essential Services of Public Health. The primary Essential Service addressed by our practicum activities was MOBILIZING community partnerships to identify and solve health problems.

We spoke with community members themselves as well as governmental representatives, business leaders and non-governmental organizations on the island. The ultimate goal of the program is to bring together all of these sectors to improve the health of the people of Roatán.

The promotora program itself will encompass more Essential Services:

- Monitor health status to identify community health problems.
- Inform, educate, and empower people about health issues.
- Link people to needed health services and assure the provision of health care when otherwise unavailable.

Visit the clinic webpage: [http://www.clinicaesperanaza.com/](http://www.clinicaesperanaza.com/)

Promotoras de Salud in Roatán, Honduras

Clinica Esperanza - a non-governmental clinic in Roatán, Honduras, founded by an American nurse

Photo courtesy of Angie Lloyd

Highlights

- Working with a native islander to perform vision screening for school children
- Presentation to local Chamber of Commerce & Industry
- Presentation to Rotary Club
- Meetings with Ministry of Health & Ministry of Education representatives

Summer 2011 • Angie Lloyd • Clinica Esperanza • Promotoras de Salud in Roatán, Honduras

(Me) giving a presentation to the Chamber of Commerce and Industry about the potential promotora program.

Photo courtesy of Angie Lloyd
Health in Rural Honduras

Shoulder to Shoulder: Public Health in Santa Ana, Honduras

By: Zuhair Siddiqui

I flew to Honduras at the end of April to work in a small village clinic with the Baylor Shoulder to Shoulder Program. This program works with the Health Committee of Santa Ana. Santa Ana has approximately 700 residents, and is located in the mountains alongside the western border of Honduras, next to El Salvador.

I traveled down to the clinic with a medical brigade mainly comprised of medical students and faculty from Baylor College of Medicine.

Public Health Significance

The Shoulder to Shoulder Program provides medical attention to thousands of people every year. This service would otherwise be much harder to find in the mountainous region in western Honduras.

The questionnaires will help give clinic visitors a voice. While the low-cost clinic does provide many services that are otherwise difficult to find, there are still needs that are not being met. The questionnaire also provides demographic information about visitors. This also provides officials with a better understanding of the population they are serving. In all, this information will be given to public health officials in the capital to explain the importance of the clinic.

Twice a year, a group comes down to Honduras to operate the village clinic. During this time, people come from all over to access services provided. I worked alongside medical students for two weeks and administered a newly designed instrument to collect data for the clinic. I spend most of my days interacting with patients and administering the surveys to willing participants. I also participated in a community health workers training, where we taught participants about ways to improve public health in their communities.

The community health workers training was an equally important component to public health. This training could have far-reaching effects, as the community health workers came from all different parts of the region. By providing them with new public health information, it could impact residents near and far.

My goal was to help Honduran residents who came to the clinic seeking help. Hopefully, my time with the program will help improve the program so that more people can get the help they need.

“Medical attention would be much harder to find in the mountainous region in western Honduras without this clinic”
Promotora Program for Roatán

Increasing the Public Health Presence at Clinica Esperanza

By: James A. Zottarelli

From July 7th to August 20th 2011 three fellow students from the University of Texas School of Public Health and I worked to increase the public health presence at Clinica Esperanza. This was accomplished in three parts: creating guidelines for making PowerPoint presentations, drafting a promotora program proposal, and continuing a vision screenings program which was initiated by Texas A&M School of Public Health students.

Guidelines for PowerPoint presentations were created to facilitate more effective classes. This was accomplished by evaluating current presentations given by Clinica Esperanza, namely classes on prenatal and pediatric health. Guidelines utilized teaching methods including repetition by “outlining, teaching, and review.”

The second specific aim of our practicum was to start a promotora program that would serve the island of Roatán. 62 key informants were interviewed to identify the needs and assets of the community. Key informants include community members, business leaders, health workers, and government employees. From their responses themes were generated and included into a proposal to the Rotary Club of Roatán. As of August 11, 2011, the status of the application is “in submission.”

The final aim of our practicum was to continue a vision screening program that the TAMUSPH students had initiated. Following their guidelines we screened more than 800 students, gave out glasses, and made referrals to an ophthalmologist brigade that visited Roatán in early August of 2011.

Overall, we made a substantial contribution to the health of Roatán and hope to pass on the torch to future students who will continue our projects as well as develop their own.

Public Health Significance

The significance of the projects that we worked on while in Roatán addressed many of the “10 Essential Public Health Services” listed by APHA. We explored the perceived health concerns of the community through key informant interviews. This community participation is a source of empowerment for the community and one that we will build upon in the future by having members of the community serve as promotoras. Additionally, several community organizations including the chamber of commerce and community leaders have been identified as potential partners. Once the promotora program is enacted they will fulfill the essential services of linking patients to care, and educating the community. It is our hope that this project will be funded at first by Rotary Club of Roatán and gradually the community will assume ownership of the program.

1. www.apha.org/programs/standards/perform

Practicum Highlights

- Gathered information from key informants on the health status and needs of the community
- Presented proposal for a promotora program
- Conducted over 800 vision screenings for elementary school children

“The best way to increase the health of the community is to build upon others’ hard work, make your own contribution, and pass on the torch so that the next person can do same”

Clinica Esperanza is affectionately known as “Hospital Ms. Peggy” locals and visitors alike. Hospital Ms. Peggy is one of the four clinics that serve Roatán's
Summer at the CDC Dengue Branch in San Juan, Puerto Rico

By: ANNE HAUSE

For the past three months, I have worked as an intern at the Epidemiology Department of the CDC Dengue Branch. I moved to Puerto Rico in May and started work at the CDC almost immediately. For my project, I was assigned to describe the epidemiology of dengue in infants.

Before I could start the project, I performed a literature search on infant cases of dengue. The next step was to identify all cases of dengue that have occurred in Puerto Rico during the past 11 years in children 18 months or younger (approximately 3500).

Our preliminary findings indicate that Puerto Rico differs from other endemic countries in regards to the epidemiology of dengue in infants. The results of the study will be submitted to a peer reviewed journal in the spring.

I was invited to return to the Dengue Branch to expand my study and will do so in January. This additional study will examine the relationship between IgG levels and disease severity in infants.

Public Health Significance

The function of the CDC Dengue Branch is to assess the risk of dengue in Puerto Rico, as well as describe its impact. The Epidemiology Department, in particular, maintains dengue surveillance, trains and evaluates health care providers in clinical management, and describes the overall impact of dengue in Puerto Rico.

My role at the Dengue Branch addresses the “APHA Essential Public Health Service” subject of Research.

Dengue in the infant population of Puerto Rico has never been described in depth. It was my goal to investigate the epidemiology of this population and provide some insight into severe disease in infants. It is essential that physicians and health care providers be made aware of the complications of dengue in this population so they may recognize and treat disease early.
Researching ART Adherence in Colombia

Adherence to Antiretroviral Therapy in the Pediatric Population

By: Vanessa Martucci

I completed my practicum at the Universidad Javeriana in Cali, Colombia. My task was to research interventions on treatment adherence among pediatric HIV-infected patients. During the course of my practicum, I was able to visit the public hospital (Hospital Universitario del Valle) and two foundations that offer support for HIV+ patients (Casa GAMI and Lila Mujer).

My final product is a literature review on interventions to improve adherence to antiretroviral therapy among pediatric patients.

The objective of the literature review is to present current literature on the topic and provide a framework for future interventions to improve ART adherence among children and adolescents.

Public Health Significance

The Public Health Essential Service (PHES) that most closely relates to my practicum experience is research for insights and solutions to health problems.

During the course of my practicum, I learned about HIV adherence, including benefits of adherence, barriers to adherence, evaluation methods, and intervention strategies to improve adherence.

I was also able to attend two support group sessions at Casa GAMI, where patients openly talked about their HIV+ diagnosis, antiretroviral regimens, and support systems. Patients in attendance were very welcoming and helpful to new focus group attendees. The foundations I visited were a great example of community support, and helped me learn what daily life is like for an HIV+ patient.

Highlights

- Visiting a public hospital in Colombia
- Visiting two foundations that support HIV+ patients
- Learning about ART adherence among pediatric HIV+ patients

“The foundations I visited were a great example of community support, and helped me learn what daily life is like for an HIV+ patient.”
Infectious Disease Eradication in Amazonian and Highland Ecuador

My Global Health and Epidemiology Practicum in Ecuador

By: Heather Murray

My practicum this summer was an 8 week infectious disease eradication program with Child and Family Health International. I followed 2 epidemiologists in Puyo and Salinas Ecuador in their pursuit to control and eventually eradicate vector-borne diseases in Ecuador. We spent most of our time doing field work in the community. For example, in Puyo, we spent five days walking to Shuar tribe centers in the jungle to vaccinate children and teach people about mosquito protection. We also traveled to individual houses in small jungle towns to destroy mosquito breeding areas and teach people about what they can do to prevent vector-borne diseases like Dengue Fever, Malaria and Chagas. My duties were primarily in public health education. I taught people about mosquito life cycles, how the microbes reproduce and are spread by mosquitos, the health effects of infection, and what they can do to prevent infection.

Public Health Significance

My project this summer focused on both monitoring the health status of the community and informing, educating and empowering people about health issues. Santa Elena is an area on the southern coast of Ecuador that suffers greatly from dog bites and rabies infections. We spent two weeks traveling to the different clinics in the area to inquire about any dog bites or cases of rabies. Once we had our information, we entered it into Excel to create easily read graphs and tables exhibiting the changes in rabies and dog bite incidences in the province every week since the start of the year. Once we had all of the information compiled, we presented public health information sessions at the different clinics. We explained to communities how the rabies vaccination campaigns for dogs implemented over the past few months have in fact exhibited a significant decrease in both dog bites and rabies cases in the region. We then explained how they could help to even further reduce cases, and keep themselves safe in the future.

“I am amazed by the innovation that arises when public health professionals have very limited access to the supplies and technology that we take for granted in the U.S.”

Heather hiking through the Amazon Jungle to vaccinate children in Shuar villages.

Highlights of my practicum:

• Hiked through the Amazon to vaccinate children in Shuar villages.

• Taught individuals about the dangers of and the prevention of mosquito-breeding sites in and around their homes.

• Assisted my mentor in a presentation on the decrease in incidence of Dengue cases in Paztaza Province, and rabies cases in Santa Elena Province.
For more information regarding The University of Texas School of Public Health, Office of Public Health Practice and the practicum program, please visit:

http://www.sph.uth.tmc.edu/academics/practicum/