Public Health Practice

Stories from the Field
Student Practicum Experiences
Summer 2011
The University of Texas School of Public Health
Regional Campuses & STEER
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: 62

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<th>Hours per Week per Student</th>
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<th>Practicum Topic</th>
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<td>Smoking Cessation - Online</td>
<td>Marisol Alvarado</td>
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<td>Birth Defects</td>
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<td>Active Learning</td>
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<td>Smoking</td>
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<td>HIV in the Dominican Republic</td>
<td>Zacharia Varghese</td>
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<td>Policy Plans</td>
<td>Samantha Weiss</td>
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<td>Birth Defects Risk Factor Report</td>
<td>Morgan Wilson</td>
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**South Texas Environmental & Educational Research (STEER)**

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The program is designed for a diversity of users: from a freshman social smoker who smokes 4 cigarettes a week to a retired UT staff member who has been smoking 3 packs of cigarettes a day for the last 50 years. Currently we are working to better tailor the website in order to make it more effective.

**Quit Smoking in College**
- Social smokers are at a very high risk to become addicted
- 1 in 3 college smokers will die from a smoking related illness.
- Many people who will become smokers have already started by the time they start college, this is the best time to initiate change

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**Public Health Significance**

Smoking is still the leading cause of preventable death in the United States. According to the CDC, more deaths are caused each year by tobacco use than by all death from HIV, illegal drug use, alcohol use, car accidents, suicides, and murders combined.

Also from a public health perspective, one must also evaluate how smoking effects other people around you. The CDC states that there is no risk-free level of exposure to secondhand smoke. Approximately 3,400 lung cancer deaths occur each year among adult nonsmokers in the United States as a result of exposure to secondhand smoke.

The goal of the online cessation program is to inform, educate and empower the UT Austin community to quit smoking. The website is also a tool to link individuals to other quit resources in order to reinforce the behavior change, such as the quitline.

The University Health Services at the University of Texas at Austin provides a comprehensive health resource to students and faculty. Quitx.org will complement the various other services they currently provide.
Public Health Significance

This practicum experience contributed to the essential services of public health by informing, educating, and empowering people about possible risk factors associated with birth defects.

Many people utilize the risk factor reports available on the DSHS website for information on birth defects. Creating a “consumer friendly” version of the risk factor report geared toward the public should make the report more accessible to parents of children with birth defects. Educating people on these risk factors aids in birth defects prevention.

The DSHS Birth Defects Epidemiology and Surveillance Branch performs several essential public health services and participates in the National Birth Defects Prevention Study (NBDPS).

Active surveillance is performed throughout Texas for birth defects; cluster investigations are initiated as needed. Surveillance data are analyzed to identify associated patterns and risk factors, and the results are disseminated through scientific publications. Also, children identified with birth defects through the surveillance process are connected with community and medical services.

Duties during my practicum:

- Developed study selection method and performed literature searches
- Updated report on risk factors for craniosynostosis
- Created a “public friendly” report explaining risk factors for craniosynostosis

“According to the CDC, 1 in 33 babies in the United States is born with a birth defect. The causes of most birth defects are unknown.”
Encouraging Health through Play

By: Katie Case

For my practicum I worked as a graduate assistant for the Colorado Active Learning project. The project, directed by Dr. Andrew Springer of the Michael and Susan Dell Center for Healthy Living, looks at ways to increase physical activity in elementary school students. Through the use of peer-directed recess activities, as well as inexpensive playground markings, the goal is to encourage children to be more active during play. The project originated in Austin, Texas but has since been expanded to Pueblo, Colorado.

During my practicum I helped create research protocols for the project, and I assisted with coordinating materials for the Colorado Active Learning staff. I also researched and created a booklet of physical activity breaks that can be used in the classroom.

Public Health Significance

The Colorado Active Learning Project seeks to inform, educate, and empower schools to take an active role in encouraging physical activity. By agreeing to participate in the project, schools recognize the importance of physical fitness and promoting healthy behaviors in young children. Through the training provided by Active Learning staff, schools receive important information about how to effectively implement the project.

Additionally, the project helps to encourage public health by recognizing the importance of promoting exercise at a young age. As stated in an article about the project, “Active Kids are Healthy Kids” (UTSPH, 2010). Research suggests that recess is an excellent opportunity to encourage physical activity in elementary school children and has benefits ranging from increased physical fitness to better classroom behavior (Ramstetter, 2010; CDC, 2010).

Finally, the Michael and Susan Dell Center for Healthy Living sponsors numerous projects that promote public health, including the Coordinated Approach to Child Health, which encourages health promotion through a coordinated school health program.
Young Leaders for Healthy Change Program Development

By: Kelly L Cordeira

ACTIVE Life is a non-profit organization that is organizing the movement for healthy change by generating a persistent demand for healthy living.

The Young Leaders program enlists high school students to change the social norm. Students complete a 12-week program designed to change unhealthy behaviors (i.e. poor nutrition, physical inactivity and tobacco use) and to train students to advocate to peers, family, and community members about living healthier. The program uses a unique combination of knowledge building, training programs, health advocacy, and service learning.

Public Health Significance

ACTIVE Life delivers several of the essential public health services to Central Texas communities. Through research, community healthy efforts, and the development of educational programs and trainings, ACTIVE Life effectively mobilizes community partnerships and individuals in the movement for a healthier society.

The Young Leaders program has been developed to inform, educate, and to empower high school students about health issues. The program specifically targets changing the current growing trends of obesity among Texas teenagers. The establishment of a strong youth voice in the community can play a crucial role in changing the social norm and advancing policies to support healthier choices linked to reducing the prevalence of obesity.

This summer, my responsibilities included conducting a literature review and market analysis, creating a list of recommendations based on the findings, and revising the program accordingly.

The most prominent recommendations included: integrate more technology and online resources, develop more ways for teens to communicate and to connect with peers and adults in the community, provide more opportunities for program and community involvement, make students feel like valuable assets in the movement for healthy change, and offer skill building.

In Texas, 30% of all high school students are obese or overweight putting them at risk for developing chronic diseases.

- CDC 2010

“Strong youth voice in the community can play a crucial role in changing the social norm and advancing policy.”

Improving Students’ Nutrition and Physical Activity Levels

By: Meredith Craft

In 2009, the Williamson County & Cities Health District founded the Wilco Wellness Alliance, a coalition of community stakeholders dedicated to reducing the prevalence of chronic disease risk factors in the county through policy and environmental change. For my practicum, I took on the role of project lead for the Alliance’s Get Fit, Get Healthy, Get Movin’ (G3) School initiative. The objectives of the initiative are to (1) assess the current health policies and environments of area schools and recommend strategies for improving student nutrition and physical activity levels, and (2) develop an after-school nutrition education and physical activity program for students at risk for obesity. My responsibilities included facilitating the initiative’s steering group meetings, performing school assessments, researching best-practice strategies for improving nutrition and physical activity levels in the school environment, and assisting with the development of the after-school program. For my final project, I created a toolkit to aid schools in identifying and implementing strategies for improving student nutrition and physical activity levels.

Public Health Significance

Approximately 1/3 of Williamson County’s school-aged children are overweight or obese. In addition, the majority of county youth do not meet recommended guidelines for physical activity and fruit and vegetable consumption (2005 Youth Activity, Weight, and Nutrition Survey). Several studies have indicated that children’s eating habits and physical activity levels can be improved through changes to their schools’ policies and environments.

The essential public health service addressed by the Get Fit, Get Healthy, Get Movin’ (G3) School initiative is “mobilizing community partnerships to identify and solve health problems”. The G3 School steering group is made up of representatives from county and state health departments, area hospitals, and local school districts. These diverse individuals have formed a partnership to assist schools in their efforts to create policies and environments that reduce obesity and support student health.
Medicaid Policy Development at HHSC

By: Christina Hoppe

This summer I had the opportunity to participate in the complex process of developing Medicaid Policy.

I believe that health policy is critical to improving overall health outcomes of individuals, which motivated me to select a practicum where I would be able to increase my understanding of policy development.

Public Health Significance

My practicum experience addresses two of the Essential Public Health services.

1. **Develop policies and plans** that support individual and community health efforts
   - Over 3.4 million Texans are covered by Medicaid
   - Policy can be influenced by many entities including the federal and state governments, Centers for Medicare & Medicaid Services, the public and organizations concerned with health issues.
   - Medicaid policy directly impacts the health care access for individuals

2. **Research** for new insights and innovative solutions to health problems.
   - All policy decisions are researched using peer-reviewed journal articles and the expertise of the health professionals.
   - I had the opportunity to research ABA services. My research allowed me to use the knowledge I gained from the policy process.
   - Innovative ways to improve care and reduce waste are a priority and require research to understand cost and benefits.

Source: http://www.friendsofautism.org/
Women’s Health and Empowerment

Field testing Hesperian’s Safe Motherhood and Family Planning Chapters from Community Action Guide to Women’s Health and Empowerment

By: ZEINA JAMALEDDINE

For my practicum I was charged with the task of field-testing Hesperian’s current work in progress “Community Action Guide for Women’s Health and Empowerment” in the Palestinian Refugee Camp in Borj en Barajneh, Lebanon.

I worked with the Palestinian Women’s Humanitarian Organization (PWHO) and organized sessions to field test the activities out of the Family Planning and Safe Motherhood Chapters.

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.
Decreasing Health Disparities

Decreasing health disparities using campaigns.

By: Asha James

I did my practicum in the health equity department of the American Heart Association. The health equity department focuses on increasing knowledge and awareness of cardiovascular disease and stroke among African-American and Hispanic communities through continual effort via community channels and trusted sources. It also encourages behavior changes.

My main role during this practicum was to help spread awareness and knowledge of heart disease and stroke by providing information about our campaigns such as Power to End Stroke, Go Red Tu Corazón, and Life’s Simple 7.

My final product was to put together a workshop presentation over Life’s Simple 7 which included getting active, controlling cholesterol, eating better, managing blood pressure, losing weight, reducing blood sugar, and stop smoking. I also created a survey to see if my presentation over Life’s Simple 7 helped facilitate behavior change.

Special events/ duties during your practicum

I went to the state capitol for a Lobby Day to encourage our state representatives and senators to support the Smoke-Free Texas bill.

The American Heart Association’s mission is to decrease deaths caused by cardiovascular disease and stroke. And they do this by creating campaigns and tools such as Power to End Stroke, Go Red tu Corazón and Life’s Simple 7 to help spread awareness, knowledge, and decrease health disparities. Therefore, informing, educating, and empowering people about health issues are essential to the American Heart Association’s mission.

Power to End Stroke
Source: American Heart Association

Go Red Por Tu Corazón

Source: American Heart Association

“Empowering individuals is essential when trying change health behaviors.”
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.”

Universidad Javeriana campus
Photos courtesy of Vanessa Martucci

Cali, Colombia
Photo courtesy of Vanessa Martucci
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.

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 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.

Highlights of my practicum
- Spending time in the pathology lab of the BSES hospital examining various slides.
- Being taught how to count to ten in Hindi by a group of children living at a leprosy hospital.

Sign at one of the many clinics in the area of Jogeshwari.
New Ventures to Improve Our Communities
By: Kerry Meath

For my practicum I had the opportunity to work with a start up company called Take Back the Trail (TBT). Equal parts social initiative and fitness apparel brand, the sale of all TBT fitness apparel will support local initiatives to empower minority women in low-income neighborhoods to take back their heart, health, and community. The initiative will include a 12-week intervention focused on self-esteem/self-respect, fitness/nutrition, and self-empowerment.

My role with TBT was to understand what health promotion programs currently exist within the community, and what women in the community would like in this type of program. This included setting up meetings with leaders across the community, and conducting focus groups with our target population.

The final product includes focus group records and IRB documentation and submission. This information will provide essential information for the program developers.

Highlights during my practicum

- Building community with leaders across East Austin
- Crafting focus group instruments
- Designing initial intervention

Public Health Significance

Take Back the Trail (TBT) aims to improve community health by addressing four primary public health services including 1) Inform, educate, empower 2) Evaluate 3) Research and 4) Develop plans to support individual and community health efforts. First, TBT primarily aims to inform women about the issues related to overweight/obesity. Next TBT hopes to educate women about how to address these issues, and more than anything TBT wants to empower women to take back their health by providing them with the resources and confidence to do so. In order to complete this mission, TBT needs to develop innovative program plans, and conduct thorough process and outcome evaluations. Part of my role within TBT was to conduct some of this early research to understand what is currently available to low-income minority women in Austin, and what kind of program components would be exciting and important to incorporate. In addition, I was able to put together some preliminary plans to address these issues, and some preliminary evaluation tools to measure what is delivered. It was an extremely valuable opportunity to work with such an interesting and fun team of women motivated to really create change in the community.
Summer Internship at the WHO!

Living and working in Geneva, Switzerland during summer 2011
By: José L. Medina

I did my internship at the headquarters of the World Health Organization (WHO) in Geneva, Switzerland during the summer of 2011. I interned for the department of Chronic Diseases and Health Promotion. My duty was to do a literature review on the effectiveness of active school transport interventions. My work was a tiny part of a bigger project. I also worked on a couple of other things as needed.

Working in Geneva was half of the fun. Living in Geneva was a great experience and I made many new friends from all around the world.

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!

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)

“I was ecstatic 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
Public Health Significance

Despite extensive research and numerous public health initiatives, smoking continues to be the leading cause of preventable death in the United States.

The Center for Disease Control and Prevention estimates that smoking causes the premature death of 443,000 people each year and leaves another 8.6 million with a serious illness. The problem is not limited to health, with annual medical costs totaling 96 billion every year. Knowing the dangers of smoking is clearly not enough to deter smoking, and college campuses are particularly interesting from a research perspective. It is a time when many young people experiment and smoke occasionally. Of those occasional smokers, more than 1 in 3 become addicted and will die prematurely from a tobacco-related disease.

Clearly, preventing college-aged students from taking up the dangerous habit of cigarettes can save lives.

Web-based Approach to Smoking Cessation

By: EMILY MORRIS

The goal of my practicum was to create an interactive and comprehensive Web site designed to help students, staff and faculty at the University of Texas Austin quit smoking through evidence-based, tobacco-treatment methods.

Still in progress, the site is designed to be used by people from a wide range of socio-economic and educational backgrounds. Currently we are in the process of tailoring individual cessation recommendations, as someone who has been smoking regularly for 30 years requires different tools than someone who started smoking occasionally as a freshman three years earlier.

The site is broken down into seven interactive steps, and includes short videos from members of the UT Austin community who have successfully kicked their smoking habit.

Benefits of promotion smoking cessation:
• Help someone take a step to drastically improve their health and extend their life.
• Reduce the number of deaths caused by smoking each year.
• Help reduce the 96 billion dollars spent on medical costs associated with cigarette use.
• Discourage potential smokers from starting!

“Quitting smoking is easy— I’ve done it a thousand times.”

-Mark Twain
Operations Management Project helps local clinic meet Public Health goals

By: TRUC PHAM

Since I am a molecular biology scientist by training, working with the Department of State Health Services, Health Service Region 6/SS on their Operations Management project offered me a chance to explore a different outlook of public health.

During the project, I worked closely with the DSHS Columbus health clinic, which serves Colorado, Matagorda, and Wharton counties. The clinic’s tuberculosis process was mapped to standardize the process with other local health clinics in the future. The clinic’s population-based services, particularly those related to the Title V Maternal and Child Health block grant, were assessed for performance. The final project was a toolkit containing factsheets and evidence-based program comparisons to help the clinic address the Title V National Performance Measure 15 in its region – reducing the number of women who smoke in the last 3 months of pregnancy.

Public Health Significance

One of the key Essential Services of Public Health addressed by both the practicum and by DSHS Family Health Services Program is the evaluation and accessibility of population-based services at the local clinics.

An entire segment of the project was devoted to increasing the number of population-based services the clinic provides. An evaluation was performed of which MCH Title V National Performance Measures are adequately addressed by population-based services and which ones are not.

In working closely with the Columbus clinic, we agreed that the NPM 15 was not receiving sufficient attention.

The NPM 15 toolkit that was created as a final project sought to diminish this gap by consolidating and presenting facts about prenatal smoking and evidence-based programs to stakeholders. The goal is to evaluate the prevalence of this public health issue in each county, educate and inform the community of its public health significance, and present evidence-based programs to address the problem.

“I realize now that public health is not a defined field – it is an exhaustive concept that infiltrates every aspect of everyone’s lives.”

Mothers and kids’ health are special focuses of DSHS and MCH Title V block grant

http://carmelagimenez.blogspot.com

Prenatal smoking affects both mother and child and is the National Performance Measure 15 addressed by the MCH Title V block grant.

http://carmelagimenez.blogspot.com
Public Health Significance

Primary Essential Health Service:
- Diagnose health problems

The main function of the lung nodule registry is to catch cases of lung cancer in the very early and more curable stages. The registry is just a tool to remind practitioners of a patient’s need for follow-up, since the recommended follow-ups can be a year apart.

Secondary Essential Health Service:
- Evaluate effectiveness of personal health services

The second function of the registry is to evaluate how well patients are currently followed and compare it to how well they will be monitored under our registry system. This comparison, however, is still in very preliminary stages. More data is needed.

Building an Electronic Registry to Follow Lung Nodule Patients

By Megan Ross

I spent my practicum at National Jewish Health (NJH) in Denver, CO, helping my preceptor build an electronic registry for patients with lung nodules.

Lung nodules are sometimes malignant and should be followed appropriately to detect any resultant lung cancer early. The lung nodule registry is intended to help healthcare providers get timely follow-up for these patients.

My role in the project was to review the radiology reports of chest CT scans and record if nodules were present. Basically, we want to compare the results of my manual nodule present/absent classification to the classification made by a computer algorithm. My final product for NJH was my dataset of the 500 radiology reports I reviewed.

Work on the project is still ongoing, so I can’t report any results at present.

According to the National Lung Screening Trial, chest CT screening for lung cancer reduces mortality by 20%.

CT scan of the lungs
(Source: http://gamma.wustl.edu/pt105cT362.gif)

Summer 2011 • Megan Ross • National Jewish Health • Lung Nodule Registry
Healthcare and Hope

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 decades 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.

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.

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.”
Public Health Implications in Child Abuse and Traumatic Injury in Children

By: Emily R. Thompson, BA

The main objective of my practicum work was to better understand data analysis of research related to child abuse and traumatic injury in children.

The primary study I assisted with was: Computed Tomography (CT) of the Chest to Evaluate Non-Accidental Trauma (NAT). The study’s hypothesis is that CT is more dependable than CXR in diagnosing rib fractures in children under suspicion for child abuse.

My tasks included working in multiple data sets to extract pertinent information related to radiology reports, ICD-9 codes, and other injuries for selected cases in this study.

I also participated in a Journal Club where my preceptor and two research coordinators discussed epidemiologic findings of two studies related to unsafe sleep practices and CT use in the ED.

Public Health Significance

The trauma service team at Dell Children’s Medical Center of Central Texas is able to provide patients and families with all 10 Essential Public Health Services. They have this ability because the team includes physicians, nurses, nurse practitioners, an injury prevention team, social workers, therapists, and researchers. Each person or group contributes to providing a cadre of public health services from initial clinical care to patient follow up.

Inform Educate: The Injury Prevention Team meets with victims of MVA, poisons, falls, and other major or minor accidents to educate patients and families on proper safety methods to decrease repeat visits or further injury once discharged from the hospital.

Research: The Trauma Research Team helps translate physician inquiry into evidence-based research studies that seek to provide answers to clinical, diagnostic, and therapeutic questions for potential advancements in the treatment of pediatric injuries.

“‘There can be no keener revelation of a society’s soul than the way in which it treats its children.’”

~Nelson Mandela

Credit: iStockPhoto.com

Special Events Attended
- EMS Education on Trauma Services for Children with Special Health Care Needs (CSHCN)
- Central Texas Injury Prevention Speakers Bureau Training
- Travis County Child Fatality Review Team Meeting

Emily R. Thompson

Emergency Services Research at Dell Children’s Medical Center
Helping children progress from injury to holistic healing through evidence-based research
HRIDAY-SHAN: Literature Review Support for a Non Profit Abroad
By: Kyle Trzaskalski

My main project on this practicum was to compile three comprehensive literature reviews. The first focused on point of sale marketing and its affect on smoking prevalence among adolescents, the findings were the more marketing plus more time in stores with more marketing generally led to higher smoking prevalence, it was also found that the more visible that packs of cigarettes were the more likely an adolescent thought they could buy cigarettes. The second looked at smoke free legislation, the main findings were with the implementation of legislation air quality was exponentially better as well as the overall respiratory health of those working in the hospitality industry improved by leaps and bounds. The third focused on community based smoking cessation models, the main findings were there are mixed results but more intensive interventions were more successful.

Public Health Significance

HRIDAY-SHAN and the work I did with this organization are mainly focused on the informing, education and empowering of individuals about the health risks involved with smoking. There was also a focus on the legislation end of smoking and how bans on smoking influence the health of a population as well as those who are most directly affected with second hand smoke. Affective community based smoking cessation programs are also looked at and why and how these programs are affective.

My project contributed to public health in that I looked at the vast amounts of literature on smoking and the point of sale, smoke free legislation and community based smoking cessation programs and was able to convey this information to the organization so they can better utilize it.

HRIDAY-SHAN as an organization contributes to public health in that they pursue activities that are focused on promoting health awareness and school activism among grade school and university students which are a vulnerable group in that they are establishing their health behaviors.

Special events/duties/highlights during your practicum

• Some of my work on the smoking legislation literature review may be used in a policy brief.
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
- Tourd 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

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.
Healthy Cafeteria and Vending

Encouraging healthy eating through cafeteria labeling and vending availability

By: Samantha Weiss, RD

I spent this summer completing my public health practicum at the Texas Center for the Prevention and Treatment of Childhood Obesity at Dell Children's Medical Center of Central Texas. I worked with the hospital's food service to achieve my objective of creating criteria for healthy food labels in the hospital's cafeteria and vending machines. Another objective was to increase the availability of healthy options in the hospital vending machines.

Public Health Significance

My practicum experience solidified that we, as a nation, need to make healthy options available for everyone. The health professionals at the hospital recommend patients limit the amount of sugar-sweetened beverages and added sugars in their diet. However, it is difficult for families to follow this guidance if the majority of products in the vending machine are candy bars and soda. Therefore, I utilized the essential public health services of policies and plans to inform and educate the consumers about healthier options.

I implemented the healthy hospital initiative selecting cafeteria foods that met certain guidelines. The cafeteria will also offer the healthy plate at a reduced price. My promotion of healthy vending products shifted once I learned the organization already developed a healthy vending policy. I supported their food selection and contributed to the healthy vending policy by recommending children friendly beverages for their vending machines. Due to time restraints, I could not complete my project. I will continue to help in the coming months.

The staff at the Center strive to eliminate the public health issue of childhood obesity each day. The staff hosted and conducted “Be Our Voice”, an advocacy training to encourage the prevention of obesity. The day-long training showcased the essentials to create change in the community. I attended the training and developed the plan for my practicum project. The success of the training is attributed to the ongoing support resources from the staff. That day was filled with community champions ready to make a difference.

Summer 2011 • Samantha Weiss • Texas Center for the Prevention and Treatment of Childhood Obesity • Healthy Cafeteria and Vending
Exploring the Risk Factors for Gastroschisis

By: Morgan Kristin Wilson

My practicum involved synthesizing a review of literature on the birth defect gastroschisis and the application of current, relevant literature to the Texas Department of State Health Services Birth Defects Epidemiology and Surveillance Branch’s (BDES) risk factor report series.

I also developed a consumer version of the gastroschisis risk factor report which is a version of the original risk factor report that is geared towards lay audiences.

Overall, the prevalence of gastroschisis is increasing worldwide. The risk factors with the strongest and most consistent association with gastroschisis were young maternal age, low pre-pregnancy body mass index and a decreased risk among African American women. Other risk factors were also associated with gastroschisis, although findings carried mixed results.

Public Health Significance

Of the ten Public Health Essential Services, my practicum experience was most closely related to informing, educating, and empowering people about health issues.

The goal of the Texas Department of State Health Services BDES risk factor report series is to summarize the literature regarding risk factors for birth defects so that people may learn more about the possible risk factors of birth defects and aids in cluster investigations.

The gastroschisis risk factor report seeks to inform about possible risk factors for gastroschisis.

The consumer version of the gastroschisis risk factor report that I created is geared towards individuals who do not have a scientific or medical background, such as a parent who may have a child with gastroschisis, a person who was born with the birth defect, or anyone pursuing simple and concise information on the defect.

The gastroschisis risk factor report can be found online at:

http://www.dshs.state.tx.us/birthdefects/rsk/BIRTH-DEFECT-RISK-FACTOR-SERIES-Gastroschisis/
Evaluation of Health Services and the Bienestar Health Education

By: Kristopher Koch

As an intern for the Department of State Health Services, my goals were to 1) design evaluative instruments for an early childhood education program Bienestar, 2) learn about how the DSHS provides health services for rural populations, and 3) research effective early childhood initiatives.

To learn more about the role of the DSHS, I participated in various trainings with the DSHS and the stakeholders in the region.

My main project was to research the Bienestar diabetes prevention program and design evaluation tools that could be used to evaluate implementation and fidelity of the program in both childcare and Headstart centers.

Public Health Significance

During my practicum, I was exposed primarily informing, educating, and empowering people as well as evaluating service. In addition, I learned how the DSHS conducts assessments of community services.

My evaluation project with the Bienestar program showed me the difference between theory and practice in public health evaluation. I learned more about evaluation tools and how to implement them appropriately.

In addition, participating in a county-wide evaluation of public health services showed me the need for providing services in low-income and rural areas and the struggles that communities face in providing services for all residents.

Through my participation in various events and trainings, I learned that everyone in public health has the interest of their community in mind, but leadership in public health is about mobilizing these resources together and moving in unison towards a common goal.

“The health of the people is really the foundation upon which all their happiness and all their powers as a state depend”.

-Benjamin Disraeli
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. http://indushospital.org.pk/

“Working at Indus Hospital has been one of the most rewarding experiences of my life.”
The Fight Against Breast Cancer

Improving Access to Breast Health Services in Dallas County

By: Darlene Bunpian

At the Dallas County Affiliate of Susan G. Komen, I reached out to other organizations and health programs to form strategic partnerships. The goal was to identify new grantees that would expand services for breast cancer screening, treatment, and education to the underserved population in Dallas County.

Through extensive internet research and Komen records review, I was able to almost double the list of potential grantees for the upcoming grant cycle. This will allow Komen to fund a variety of new projects and services in Dallas County. I also compiled a listing of breast health resources for general distribution. This included resources for Rockwall and Ellis Counties, which are not currently served by the Dallas Affiliate.

Also, I attended health fairs to help educate the community on breast cancer awareness as well as updated the listing of legislators for policy/advocacy initiatives. My practicum experience culminated in the creation of the presentation to be used in their grant writing workshops.

Special events/duties/highlights during your practicum

• Working the Komen booth at local health fairs for community outreach
• Creating/updating a listing of local breast health resources
• Identifying new partnerships and Komen grantees
• Attending a grantee meeting and grant writing workshop

Public Health Significance

Susan G. Komen for the Cure® is a non-profit organization that has successfully generated an awareness of breast cancer and the importance of screenings and early detection. Through local health fairs, fundraisers, and other events, we are able to inform, educate, and empower people about breast health issues. We also utilize a large volunteer base, and they reach out to even more people in the area.

Through our community health grants, we are able to mobilize community partnerships to identify and address breast cancer needs in the underserved population of Dallas County. We collaborate with local hospitals, clinics, assistance groups, and other non-profits in order to increase patient access to breast health services.

Our community grants program also enable us to link people to health services and health care that would otherwise be unavailable to them. For example, we fund mobile mammography units that provide free mammograms to the uninsured. We also award grants to programs that provide financial assistance, transportation, prostheses, etc. to uninsured individuals who are undergoing treatment. My hope is that the work I completed this summer will expand our repertoire of grantees and also improve the variety and quality of breast health services in our community.
Public Health Significance

According to the Agency for Healthcare Research and Quality, more than 770,000 patients suffer a preventable adverse drug event related injury or death each year. This public health problem must be addressed as an epidemiological problem (identifying which drugs are impacting which patients and what factors are associated with adverse effects so that we can institute preventative measures). It is also a public health management and policy concern because adverse drug events cost hospitals millions of dollars per year.

This project addresses the essential public health service, “Evaluate effectiveness, accessibility, and quality of personal and population-based health services.” A large part of this project involved evaluating the effectiveness of the FDA MedWatch system for reporting adverse events, and we have been in contact with representatives of the FDA in order to better understand the mechanisms of data collection and goals for using MedWatch data. We also addressed the essential public health service, “Research for new insights and innovative solutions to health problems” by conducting novel public health research.

Using health informatics to identify and prevent adverse drug events

By: Christen M. Buseman

My practicum was in the department of Bioinformatics at UT Southwestern Medical Center in Dallas. My project was to validate the use of data from electronic health records to identify adverse drug events. My team collaborated with the public health informatics company, Lead Horse Technologies, which has created informatics technology that utilizes data from the FDA adverse event reporting system, MedWatch, in order to identify common adverse drug events. Our goal was to validate the MedLoom technology by identifying the same adverse drug interactions in a completely independent sample by using electronic health records from the UT Southwestern University Hospitals. The ultimate goal is to prove that health informatics is a valuable tool in identifying adverse drug interactions, and to promote technologies such as MedLoom which can be used as a tool to prevent adverse events.

Special events during my practicum:

- Attended a meeting in which key health informatics stakeholders at UT Southwestern with the makers of MedLoom Clinical Decision Support System in order to discuss adoption and integration of this new technology into the University hospitals and clinics.
- Attended weekly meetings of the UT Southwestern academic information resources group

“Preventable adverse events are a leading cause of death in the United States.”
- IOM, 1999

Lead Horse Technologies is a public health informatics company that created a clinical decision support technology known as MedLoom. The purpose of MedLoom is to help prevent adverse drug events: http://www.leadhorsetech.com

Many patients take more than one medicine at a time, increasing the risk of adverse drug events. Clip art from www.serpholicmedia.com
Public Health Clinic

Working on the clinical side of public health

My practicum involved working at the clinical side of our health department for the summer where I performed several tasks such as epidemiological investigations, working with the NEDSS system and developing training manuals and spreadsheets for future use by clinic staff.

The final product involved several manuals that were developed to easily access communicable disease information for staff members to use while investigating and entering communicable disease investigations into the NEDSS system.

Public Health Significance

My practicum experience was most closely related to the Essential Public health service of diagnosing and investigating health problems in the community.

This is key to public health because once a report comes in of someone who might have been diagnosed with a communicable disease, it is imperative to get in contact with that person and ensure that they are aware of their diagnosis and that they take the necessary provisions such that they do not spread the disease unknowingly to the community at large.

Also, the investigation may help uncover any possible outbreaks that may be occurring or potentially ensuing.

Special events/duties during your practicum

- Conducting routine epi investigations
- Entering investigations into the NEDSS system
- Developing manuals and cheat codes that helped make the clinic staff’s job a lot easier

“You quickly learn that it is key to obtain as much information as you can while doing an investigation.”
Syphilis Screening in High-Risk Male Dallas County Inmates

By: Shakira Johnson, PA-C, MMS, MPH candidate

During this summer’s practicum, I screened high-risk, male Dallas County Jail inmates at Lew Sterrett Criminal Justice Center. There, inmates were tested for syphilis, but also HIV, Hepatitis B and C. High-risk inmates were defined as those who were self-identified as homosexual, bisexual, transsexual, and/or HIV-positive. The inmates there are offered housing in HIV or homosexual cells based on their preference. A total of 9 cells are available: 4 HIV cells and 5 homosexual cells with a potential to house a total of 120 inmates. In May and June, my team and I were able to successfully screen 114 inmates for syphilis. By default, we included HIV and hepatitis screening to cover all blood-sensitive STDs. Of the 114 inmates, 89 were HIV-positive at the time of screening and the remainder were MSM (men who have sex with men). In May, there were 9 inmates positive for syphilis; while in June there were 10, equaling 16.7% of the study population.

Public Health Significance

The CDC reports that in 2006 there were over 36,000 cases of syphilis in the United States, which was an 11.8% increase from the previous year. These alarming statistics demand the attention of public health officials. With these facts in mind, this practicum focused on the essential public health services of monitoring health status, diagnosing and investigating, and informing, educating, and empowering. In conjunction with the Dallas County Health Department, the clinicians at the Dallas County Jail should continue to use the incarceration period as a prime opportunity to screen, diagnose, treat, and educate inmates on all STDs. Furthermore, prevention is promoted by encouraging monogamous relationships and the use of condoms. Educational classes are offered on a weekly basis in collaboration with the University of Texas Southwestern Medical Center. With the aforementioned efforts, I am hopeful that more STDs will be prevented or, at least, diagnosed early and treated.

“There is an estimated 2- to 5-fold increased risk of acquiring HIV if exposed to that infection when syphilis is present.” (CDC)
Public Health Significance

The CCLS represents a well established cohort that has provided insights into the importance of physical fitness in the scientific literature for more than 30 years. The collaborative effort between the Cooper Institute and the University of Texas Southwestern Medical Center at Dallas provides cutting edge research, which is an important aspect of essential public health services (EPHS). In addition, to inform, educate and empower people about health issues, which are also critical facets of EPHS, have been well delivered by these organizations through several educational publications in the form of books, instructional media, audio study guides and innovative fitness tools.

To conclude, the results of the current study will provide additional insights into the exercise treadmill test that might identify individuals at risk for future CVD death. Moreover, the findings might emphasize the importance of fitness and influence strategies to reduce CVD in the population.

Prevalence of abnormal exercise stress test characteristics among adults with premature cardiovascular disease (CVD) death

By: SAGAR KINGE

It is often cited in the literature that around 90% of the people who developed or died from cardiovascular disease had antecedent traditional risk factor/s, e.g. high cholesterol, high blood pressure, smoking, diabetes etc. Thus, the remaining 10% will have no prior traditional risk factor, suggesting the importance of novel risk factors in these patients. We identified individuals with complete set of traditional risk factors and exercise treadmill test. Among this cohort, we extracted the charts of those who died from CVD. My job was to systematically review the literature, prepare chart review worksheet for these participants and expose to the public health components of the department. This information on additional characteristics of exercise treadmill test will promote greater insight into future questions about contribution of fitness to CVD risk prediction.

“Where ever you work, you have to put all your efforts to deliver best results.”

Special events/ duties during the practicum

• Get exposed to the public health components of Department of Cardiology
• Systematically review the literature for fitness and CVD
• Participate in weekly symposia and presentations
Public Health Emergency Management

Learning to be prepared for and respond to all situations

Lacie Reitmeyer

Working at Collin County Homeland Security yielded many great experiences and opportunities for me. I worked with the bioterrorism team on disaster preparedness issues. Some of the duties assigned to me throughout my practicum included helping to organize materials for the Collin County Medical Reserve Corps (such as disaster preparedness packets and 72 hour emergency kits), and developing hand washing public service posters and brochures. Along with my duties as an intern, I was also afforded many opportunities to grow in my career. These opportunities included: becoming HAM radio certified, attending the 2011 Integrated Medical, Public Health, Preparedness and Response Training Summit, participating in a pandemic influenza tabletop exercise, multiple FEMA ICS trainings and observing a full scale Strategic National Stockpile (SNS) Point of Dispensing (POD) exercise.

Public Health Significance

The work of the team at Collin County fulfills several of the ten Essential Services of Public Health, primarily empowering and education as well as developing planning materials. Part of this education included distributing preparedness materials to Collin County residents and explaining the importance of being prepared for disaster situations. Planning for these disasters is also one of the office’s responsibilities. Through my practicum I had the chance to help coordinate a seminar for faith based organizations that allowed them to meet area emergency managers and gave them important information on how to protect their organization. This seminar also informed organizations of disaster mitigation opportunities including planning and exercises.

References:

Highlights:
- HAM Amateur Radio Certification
- Participation in a pandemic flu tabletop
- FEMA ICS 100, 700, 800 etc.
- Observer for a SNS POD Full-scale exercise

“A disaster is not the time to pass out your business card.”

Tornadoes frequently threaten the North Texas area and citizens should prepare. Medical Reserve Corps members receive training opportunities and the chance to serve their communities in times of need.

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“A disaster is not the time to pass out your business card.”

Photos courtesy of Jake Bathman

Tackling Childhood Obesity

The challenges facing Denton County Health Department officials, patients, and parents.

Arianne Rhea - UT HSC SPH, Dallas Regional Campus

Obesity among children has not always been a pressing public health issue. In 30 years, the proportion of children falling into the realm of “obese” has nearly tripled; in 1980, a mere 6.5 % could be considered obese, whereas 19.6 % fell into that category in 2008 (ages 6-11) [http://www.cdc.gov/healthyyouth/obesity/].

During my practicum, I focused on how childhood obesity affects Denton County by developing possible intervention and prevention strategies for the local health department. In addition, I created and implemented a parent survey to gather the opinions of mothers and fathers who bring their children to DCHD for regular health checkups. Quantifying these opinions, and comparing them with medical record data, I was able to develop a comprehensive report on childhood obesity as it currently stands at the Denton County Health Department.

Public Health Significance

In general, the health department in Denton County is structured to support the ten essential functions of public health; however, specifically in my practicum, the focus rested on diagnosing the affect of rising childhood obesity in the community, informing, educating, and empowering people about the issue, and mobilizing community partnerships to address county-wide concerns and solutions. For example, when giving the parent survey and examining recent medical records, I was diagnosing the prevalent beliefs and actual status of patients. When creating fact sheets, tri-folds, and intervention proposals, I was informing, educating, and empowering. Finally, when presenting my findings to the Healthy Communities Coalition in an all-encompassing review, I was mobilizing community leaders who have the power to slow the spread of adolescent obesity among local children.

Picture Credit: http://s.wsj.net/public/resources/documents/st_childobesity_20090720.html

Texas currently has the 7th highest proportion of obese children out of all 50 states in the USA. [http://healthyamericans.org/reports/obesity2010/]

http://arch1design.com/blog/latest_environmental_health_news/childhood-obesity-prevalence-and-prevention/

http://painfreeposturemnandpiiatesintegration.wordpress.com/2011/03/01/10-frihtening-facts-
Role of Obesity on Sex Steroid Hormones and Inflammation Markers in Mexican-American Men

By: Olivia Gonzalez

The proposed study is to investigate the role of obesity on levels of sex-steroid hormones and inflammation markers among Mexican-American men employing different measurements of adiposity. This study will provide insight into understanding the influence of traditional (BMI and WC) and gold standard (VAT and SAT) measurement of adiposity on the sex steroid hormone and inflammation pathways after taking into account socio-demographic, epidemiologic and dietary factors in MA men. New data in the interplay of sex hormones, inflammation and measurements of adiposity will shed light regarding the hypothesized increased risk of obesity-related prostate cancer outcomes.

I have to participate collecting blood sample from the participants, and conducting demographic survey as well.

I received a special training to conduct different activities that this study requires.

Public Health Significance

The “Mano a Mano” – Mexican-American Cohort Study is a population-based infrastructure of Mexican American Households in Houston, TX. This was initially established in July 2001, with funds from the State of Texas Tobacco settlement and it is an on-going cohort. Currently, there are almost 13,021 households enrolled in this population-based infrastructure with a total of 17,939 adults (22% male ≥ 18 years old). Study participants complete a consent form and baseline questionnaire at enrollment. The questionnaire is divided into the following components: demographics and socioeconomic status, personal and family medical history, acculturation, lifestyle or social habits, birthplace and length of US residency. Consent for one-time blood draw was obtained at the time of home-interview. This research project proposes to recruit 94 new study participants, who will follow the same recruitment and data collection methodology from the parent study. The new data obtained will include dietary, anthropometric measurements, adipose tissue and blood specimens for sex hormones and inflammation markers.

https://epi.mdanderson.org/Projects/MACohort/mano/logo.png?imgrefurl
Parent Support Groups

Recruiting and starting Parent Support Groups
By Amelia M. Ugarte

The health issue I worked on during my practicum was on planning for adoption, implementation, maintenance and sustainability of health promotion programs through the creation of self-help groups. The approach taken by our organization was to recruit parents directly from the community and to partner with different community organizations to obtain referrals to attend our parent support groups meetings.

Part of my duties in the project included recruitment; leading support group meetings; translating relevant materials for our audience, and contacting community organizations to develop partnerships. We have tried different recruitment strategies and we have found that recruitment has been more difficult than originally anticipated; therefore, my final product when the project is done will be to help develop a recruitment tool.

Public Health Significance

The Public Health Essential Services (PHES) that most closely relate to my practicum experience are:

- To inform, educate, and mobilize community partnerships to identify and solve health problems.
- Most importantly, to empower parents about health issues by the creation of self-help groups.

This project assists and empowers parents to form consumer-run organizations (self-help groups) to address different challenges parents face.

By establishing community partnerships, we can recruit and provide services needed in our community.

This program is provided through the University Of Texas School Of Public Health, which has a different array of Public Health programs throughout the State.

During my practicum:
- There were three parent support groups created.
- We developed materials in Spanish appropriate for our audience.
- We utilized different recruitment strategies to reach our audience.

“A parent support group is a group of parents who come together on a regular basis around the shared challenge of parenting.”
Dr. Louis Brown

Summer 2011 • Amelia M. Ugarte • University of Texas School of Public Health • Parent Support Groups
Evaluating the Effectiveness of a Fitness in the Park Program

By: Jen Bolduc

For my practicum, I assisted the San Antonio Metropolitan Health District in evaluating the effectiveness of a community-wide program that featured free fitness classes in city parks.

Initially, I conducted formative research to identify other cities with similar programs and other local programs conducting similar evaluations.

I also reviewed current literature to identify tools and methodology used to evaluate community fitness programs.

Upon completion of the formative research, I worked with the health department to determine other evaluation objectives to help inform future Fitness in the Park classes.

Finally, I created the evaluation tool, an online survey which the health department emailed out to participants.

Evaluation is essential to determining which programs work and which programs do not work. The evaluation process helps inform future programs so that better decisions can be made to maximize program effectiveness.

My project will make an important contribution to public health by “evaluating effectiveness, accessibility, and quality” of the Fitness in the Park community-based health program.

With the findings from the evaluation survey I created, Metro Health can make better decisions for the fall program including the best medium to use for program promotion. The survey will also show if the program effectively increased participants’ exercise behavior or encouraged them to try a new type of exercise.

In recognition of the importance of evaluation, Metropolitan Health District hired the UT School of Public Health (San Antonio) to evaluate Fitness in the Park’s parent program CPPW. In addition to Fitness in the Park, CPPW includes several other pilot programs which are also being evaluated.
A Retrospective Study of the Postoperative Complications for Radical Cystectomy Patients

Tim Clinton, MD/MPH UTHSCSA Student

This practicum was performed with urologic oncologist Dr. Robert Svatek at the UTHSCSA Urology Department. A research project was designed to look at patients undergoing radical cystectomies due to bladder cancer. The postoperative complications of patients who underwent open and robotic cystectomies since 1998 were researched to look at how their race and funding status affected their outcomes.

By determining different race and funding status values that are more at risk, more information can be given to those patients to help in prevention of negative outcomes.

Currently two research papers are being written as the statistics are evaluated for this research project. The health outcomes of cystectomy patients will be greatly increased for a procedure that sees complications in over 40% of patients.

Public Health Significance

The practicum experience of working with the UTHSCSA Urology Department and performing research under Dr. Robert Svatek has the unique ability to blend public health and a surgical specialty. As an MD/MPH student, it is important to understand how public health can become a part of a clinical practice. This practicum experience most resembles the Research service of the Essential Public Health Services. In fulfilling this public health service, new insights to the betterment of surgical outcome can occur.

Personally my project of looking at postoperative outcomes of bladder cancer patients undergoing radical cystectomies will provide information to urologic oncologists on those patient populations most at risk for postoperative complications. This project included a lot of public health knowledge including biostatistics and epidemiology.

Best Part of Working with UTHSCSA Urology

- Ability to scrub in on surgeries requiring the use of the cutting-edge da Vinci surgical robot
- Interaction with all departments of the hospital pertaining to patient records and research

Working with UTHSCSA Urology as a practicum has the unique ability to blend public health and a surgical specialty

Image From: Intuitive Surgical Inc. “Urologic da Vinci surgery”. 2010
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.

Evaluating Water, Sanitation and Hygiene Practices

By: Natalie Cobb

During my practicum, I had the opportunity to work on 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.

Practicum special events/duties

- Conducted a survey on WASH practices.
- Introduced 3 ceramic water filters into the local school.
- Collected qualitative data to learn about neighboring communities.

“Inadequate access to safe water and sanitation services, coupled with poor hygiene practices, kills and sickens thousands of children every day.”

- UNICEF

http://www.unicef.org/wash/

Evaluating Water, Sanitation and Hygiene Practices

Standing water around homes in Batey Altagracia, Dominican Republic.
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.
The Vanguard Health System, Leadership Academy, Experience

By: Elizabeth Curnow

Vanguard Health System (VHS) is the corporate owner of Baptist Health System and 30 other hospitals across the country. Every year they select participants (Physicians, Nurses and Operations) to participate in the Vanguard Leadership Academy (VLA). The VLA is a leader development program designed to expand innovation for current leaders.

Public Health Significance

A program like the VLA has the opportunity to connect with almost all essential public health services. In the private healthcare industry our clients are our patients. Vanguard Health is beginning a movement toward ‘Health for Life’ and the effort to move from sick care to well care.

Our project contributes to public health by supporting the essential public health services of linking people to personal health services and by providing competent and compassionate healthcare providers.

The VLA is a 3-year appointment with meetings across the country including tasks, readings and projects between each face-to-face meeting.

The product is a multi-disciplinary healthcare improvement project. Our project is a mentorship program for middle managers designed to help them become well rounded in the face of changing healthcare.
Lead Poisoning Prevention

Childhood Lead Poisoning Prevention Program

By: Nora Defee

The mission of the San Antonio Childhood Lead Poisoning Prevention Program (SACLPPP) is to eliminate lead poisoning in children residing in the San Antonio and Bexar County areas.

To achieve optimum results the program works in three different areas: education, case management of reported cases, and resource referrals as pertinent.

As a part of the practicum, I had the opportunity to go out to the community during lead screening tests to assist with children’s education.

I also assisted in conducting phone interviews (English and Spanish) with the parents / caregivers of Medicaid lead poisoned reported cases between 2006 and 2010 to try to identify the reasons for non-compliance to initial lead screening and/or follow-ups. Results were reported in a final written report.

In addition, I had the opportunity to prepare a poster to disseminate information on lead poisoning risks and prevention during pregnancy.

During the phone interviews, parents were informed as well about the importance of having their young children tested on time and continue with follow-ups if necessary.

They were also informed about the risks associated with Elevated Blood Lead Levels (EBLL) in children 6 years old and younger due to the greater neurotoxicity observed in this age group.

Public Health Significance

The practicum dealt mainly with the Public Health essential service to inform, educate, and empower people about health issues particularly related to lead poisoning in children.

In this specific area the program provides educational materials and educational sessions to parents / caregivers, to children, and to health care providers.

During the phone interviews, parents were informed as well about the importance of having their young children tested on time and continue with follow-ups if necessary.
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.
Identifying Potential Risk Factors associated with Steal Syndrome in the San Antonio Population

By: MEREDITH GREER

This summer I worked with dialysis access patients in the UHS Vascular Surgery Clinic with Dr. Benjamin Pearce, MD.

Our project focused on addressing the risks associated with Steal Syndrome that may be specific to the San Antonio population.

Steal Syndrome occurs in vascular dialysis patients who have received an AV Fistula/Graft. When the flow into the venous side of access is sufficient to induce reversal of the flow in a portion of the artery distal to the access, a phenomenon known as steal occurs.

Symptoms of steal range from mild where the extremity is simply cold, to severe where ischemic pain is present at rest and tissue loss occurs.

Steal Syndrome in San Antonio

Figure 1: Vascular access via AVFs: photoplethysmographic waveforms

Figure 2: Stage 3 Steal Syndrome presents with constant pain and severe ischemia, which can lead to cyanosis and necrosis.

“Steal Syndrome occurs in vascular dialysis patients who have received an AV Fistula/Graft. When the flow into the venous side of access is sufficient to induce reversal of the flow in a portion of the artery distal to the access, a phenomenon known as steal occurs. Symptoms of steal range from mild where the extremity is simply cold, to severe where ischemic pain is present at rest and tissue loss occurs.”

Public Health Significance

The Public Health Essential Services that most closely related to my practicum experience are monitoring, diagnosing, and investigating.

As a clinic, we monitor the health status of all of our patients individually. By putting together this research project, we consolidated patient data together to identify a community health problem – steal.

By figuring out what the common risk factors for steal are among our population we hope to be able to better educate our patients on ways in that they can prevent steal from occurring after AV Fistula/Graft.

We also hope to compare our study to others done throughout the country. By doing this, we will be able to identify what risk factors are specific to San Antonio patients compared with patients in other regions.
Mayor lead initiatives: Moving from hope to change

By: Jenny Hixon, MPH

The San Antonio Mayor’s Fitness Council (MFC) was established in the summer of 2010 through a TX DSHS grant. As the first year of activities ended, I was tasked by San Antonio Metropolitan Health District with assisting the MFC develop plans for sustainability. As part of this assessment, MFC stakeholders identified priorities for group activities and identified lessons learned from the first year of activities. Three major themes emerged: 1) Much has been accomplished and people are proud of what was done with little funding and little staff support 2) The MFC needs to develop a unique identity from other health promoting coalitions in San Antonio, 3) Staff support is essential for future activities. The MFC is developing a new organizational structure to address challenges identified in the first year of activities.

Public Health Significance

Mobilizing community coalitions and partnerships is one of the essential public health services. The Mayor’s Fitness Council is an example of a partnership between a local health department and local policy makers who unite to address community health issues. The MFC represents a partnership between the broader San Antonio community, the local health department and the Mayor’s Office. This partnership was formed to reduce the burden of obesity in San Antonio and target systems, policy, and environmental change in support of the broader goal of obesity reduction. The MFC supports a broader community change effort developed by Mayor Castro, the SA2020 project. Similar to Healthy People 2020, SA2020 sets out a series of vision areas and targets for improvement for the San Antonio community. SA2020 was developed through a participatory process with San Antonio residents. The MFC has been charged with implementing the health and fitness vision area that includes a broad definition of health improvement. The MFC has identified that they cannot do all the work necessary for community change alone and are continuing to expand and clarify partnerships with other community based groups and agencies. This process of coalition building is essential to public health campaigns that aim to improve the health populations through systematic change.
Perinatal Periods of Risk Approach to Fetal and Infant Mortality

By: Nancy Hunt

My practicum experience was with San Antonio Healthy Start, a program under the Metropolitan Health District. The program’s goal is to provide resources and information to pregnant women and mothers in order to ensure a healthy birth and family.

We are concerned with the fetal and infant mortality rates within Bexar County and would like to decrease these rates. In order to prevent these deaths, we need to find out why these deaths are occurring. The Perinatal Periods of Risk Approach (PPOR) is a statistical analysis used to determine at what ages and stages these infants and fetuses are at greatest risk for death and to identify health disparities.

I gathered fetal and infant mortality data from the county to analyze so that we can begin to develop targeted prevention measures to combat mortality.

Public Health Significance

This has been a great experience as I have been afforded the opportunity to participate in a variety of public health essential services.

The initial phase of PPOR is to monitor the health status of the community and to identify health disparities and needs of the community.

I was also allowed to observe our case managers on their home visits. These visits serve to empower and educate our clients about pregnancy, family planning, nutrition and other health topics.

The next phase of PPOR is to mobilize the community by finding important stakeholders. We have already initiated a wonderful partnership with Voices for Children, a child advocacy group. I have also attended our first ICC Family Planning Collaborative Meeting with key organizations in order to provide a multidimensional approach to family health.
The South Texas Oral Health Network

My Experience with a Dental Practice-Based Research Network

By: VY NGUYEN

Established in May 2008, the South Texas Oral Health Network (STOHN) is a dental practice-based research network comprises of a group of academic investigators and private dental practitioners that not only provide dental care to patients but also participate in clinical research within their practice. Through the network, I was able to participate in the various steps necessary in conducting studies within a practice-base research setting. The network was involved in studies on the prevalence of undiagnosed diabetes in dental offices, dental practitioner’s knowledge on bisphosphonate-related osteonecrosis of the jaw, and smoking cessation. My experiences included conducting literature reviews, collecting and analyzing data, disseminating study results, and writing a journal article for publication.

Public Health Significance

STOHN plays an important part within the public health community. Through clinically relevant studies that were developed by practitioners within the community, STOHN is able to collect, analyze, and share health data and information to improve oral health care and minimize health risks within the community. STOHN is able to investigate occurrences of health effects as evident in determining the prevalence of undiagnosed diabetes in dental office. In addition, STOHN is able analyze determinants of identified health needs such as investigating barriers and providing solutions for tobacco cessation counseling. STOHN also serves to mobilize community partnerships to help solve oral health problems by bringing together private practitioners and academic investigators within the community through collaborative studies and meetings. STOHN also functions to inform, educate and empower people about health issues by disseminating all study results back to the community through such projects as the tobacco cessation toolkit.

Special events/duties during your practicum

- Prepared for the 2011 STOHN Summer Meeting on Aug. 5
- Wrote and edited the July 2011 newsletter
- Presented the “Clear the Air” tobacco cessation toolkit to focus groups

“Generating evidence that matters in dentistry.”

The “Clear the Air” Tobacco Cessation Toolkit CD that was presented to various focus groups. (Photo courtesy of Vy Nguyen)
Lessons Learned through Community Health Screening during the Evaluation of San Antonio Fit Family Challenge

By: Gerardo J. Pacheco

The goal of this experience was to assist in the evaluation of the Fit Family Challenge in various ways in order to justify and ensure funding for such programs across the city. The scope of this program was to capture data from at least 10 families from each of the 7 participating school districts in San Antonio and quantify the impact of their participation. The program effectiveness will be quantified by comparing data collected during enrollment of the program and with data collected 2 months after participating in the program including body metrics such as BMI, heart rate during a controlled exercise, body fat percentage, and blood pressure. We also surveyed participating adults to identify their perceptions about overall health status, physical activity, and nutrition. The emerging trends can illustrate the community’s needs.

Public Health Significance

Although the goal of this project was to conduct a program evaluation, it seems that we were able to inform, educate, and empower people about health issues. Through our basic health assessment sessions, even informing the participants of their weight or the significance of understanding their body mass index and heart rate empowered them to think beyond ‘skinny and fat’ and instead focus on exercising and cardiovascular wellbeing. It was also remarkable to note that some individuals were even hesitant to step on the scales or hear that they had not known their weight because they were in denial. To me, it seems that just having some of these very unhealthy individuals come out to the events and hear their numbers was a positive step in improving their health.

This project was not an intervention or scientific research, but still provides the baseline for further research to elucidate the correlation between psychosocial and ecological factors.
Helping Underserved Students Achieve Higher Education

By: Sarah Simmons

CollegeVISTA is dedicated to helping underserved high school students achieve a college education. The students that CollegeVISTA targets come from poor areas of the city, and are typically the first in their families to attend college.

CollegeVISTA’s goal is to help students break the cycle of poverty, and enable them to achieve their goals of higher education.

Public Health Significance

CollegeVISTA serves the interests of public health by assuring that the cycle of poverty and lack of education does not continue in San Antonio. It is well documented in the public health literature that educational attainment is linked to a variety of health outcomes.

CollegeVISTA is able to affect this cycle because it informs, educates, and empowers the students and their families about the importance of higher education and how it impacts both financial and personal health.

CollegeVISTA accomplished this goal by working with both parents and students to overcome the financial, social, and academic hurdles that limit academic achievement.

Practicum Highlights

- Help students overcome barriers to college admissions
- Identify opportunities for the program to be more successful

“Once social change begins it cannot be reversed. You cannot uneducated the person who has learned to read. You cannot humiliate the person who feels pride. You cannot oppress people who are not afraid anymore.”

- César Chávez

Maria J. Fernández. Founder of the CollegeVISTA program

Images provided by CollegeVISTA. www.collegevista.org
Public Health Significance

This practicum focused on two of the Essential Services of Public Health: Evaluate effectiveness, accessibility, and quality of personal and population-based health services; and the Development of Policies and Plans that support individual and community health efforts.

People identified the need for an excellent health care in order to have a healthy living and a healthy community.

Access to primary care will be able to minimize medical complications, hospitalizations, emergency procedures and medical cost.

This patient centered medical home practicum may increase satisfaction of care, better access to health care and improve health.

During the summer of 2011, I had my practicum experience in the Department of Family & Community Medicine in University of Texas Health Science Center under Dr. Carlos Roberto Jaen, Dr. Robert Louis Ferrer and Dr. Ramin Shokati Poursani.

As part of the concept of Patient Centered Medical Home, the department has an ongoing pilot study on Advanced Primary Care Project, which I helped in categorizing the data into medical or social issues significance. I also helped in summarizing the reasons of patients' calls from the call center survey.

I did a survey in the ExpressMed Clinic (EMC) to find out of patients insurance status, reasons of visits, and having PCP. Those who have PCP’s, if they contact their PCP’s, if they contact their PCP’s before coming in the EMC and the reasons why they didn’t go to their PCP’s office instead.

“I don’t have a primary care physician and no medical insurance.”


University Health System Family Health Center – Downtown San Antonio Texas known as Brady Green, is a complex of ambulatory care clinics providing both primary and specialty care.

Achieving Better Services For Patients:
• Advanced Primary Care Pilot Study
• Reasons of Calls in the Call Center Survey
• Survey patients in the ExpressMed Clinic Downtown Location

Approach to providing comprehensive primary care.

By: Francis M. Torres
I worked as the GIS analyst with the South Texas AHEC (Area Health Center) to assist in the preparation of the Laredo CHA (Community Health Assessment). I have a strong interest in border health issues and hope to continue my doctoral research along the Mexico – Texas border. There was an opportunity to work on the CHA and lend GIS expertise to analyze social, economic and health data and I was pleased to assist in this effort.

My main task in this CHA was to conduct extensive research in order to identify secondary data for social, economic and health indicators for 6 counties in South Texas, focusing heavily on Laredo (Webb County), and apply GIS technology to analyze the data. I created a series of decision and health profile maps. One particularly important series of maps and ranges of median house values which were was used to identify census tracts where 400 youth, working adult and senior household surveys were conducted as part of the needs assessment.

The final product was a series of social, economic and health data maps.

The public health significance of this was to assess and prioritize health and public health issues for residents in Laredo. The most relevant Public Health Essential Service relating to this practicum experience was “Diagnose and Investigate health problems and health hazards in the community”.

The major task to be accomplished by the Laredo Community Health Assessment team was to create 3 different surveys targeting 3 populations in order to assess and prioritize health and public health issues for Laredo: Youth, Working Adults and Seniors. I created GIS maps based on median household values ranges for 25 census tracts in Webb County. The maps were used to depict median house value ranges by census tracts. The census tracts were then used to identify households for administration of 400 households.

I also created maps depicting 5-Year Population Change, Poverty Levels by Independent School District, Graduation Rates by School Districts, Toxic Releases by Zip Code for Chemical, OSHA Carcinogen, Hazardous Air Pollutants, and Lead; Preschool Children Obesity and Diabetes Percentages, and Adult Obesity and Diabetes Percentages.
Type I Diabetes at Texas Lions Camp

Managing Diabetic Care and Education in 250 Texas Teenagers

By: John Vizuete

My Practicum Experience occurred outside of Kerrville, Tx at the Texas Lions Camp (TLC). TLC sponsors children across the state with disabilities to go to summer camps free of charge. Two weeks are dedicated to children with type I Diabetes, an endocrine disease affecting the pancreas. In type I Diabetes, the body does not produce sufficient amounts of insulin, the main hormone for regulating blood sugar. Medical staff including doctors, nurses, dietitians, pharmacists, and students come together in effort to manage the blood sugar of about 250 children, 24 hours a day. We focus on keeping the kids within a normal range in order that they can safely participate in numerous activities and ideally forget about their disease for a time. We focus on educating groups about their disease, communicating medical information, risks, and strategies to deal with this disease.

Public Health Significance

My time at TLC addressed several of the core functions of public health. Monitoring the health status of the community of campers was accomplished by workers divided into 4 teams. In addition to regular blood sugar testing, which is done 5 or more times throughout the day for ALL campers, medical staff lead daily educational sessions focusing on information relevant to the teenage population. For example, “what should diabetic teens know about how alcohol affects their blood sugar.

Education is premium at TLC, and we always want kids to go home with more than they came with.

Keeping with the Essential Services of informing and educating, we perform before and after assessments of knowledge and skills to manage diabetes, allowing measurement of improvement. Many children come to camp not knowing much about their disease and left administering their own insulin.

Duties and Activities

- Led daily interactive education sessions
- Personally managed blood sugars for 8 adolescent males
- Performed before and after knowledge and skills assessments

"Texas Lions Camp allows over 250 children to forget their disease and enjoy themselves for a while!"

Image courtesy of Texas Lions Camp ©2011

Children Can... With TLC

Medical Staff 2011
Photo courtesy of: Dr Stephen Ponder

Managed by: John Vizuete
Kerrville, Tx
Type I Diabetes Management and Education
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.1 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 well 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”
South Texas Environmental Education and Research (STEER) immerses health professions students and faculty in the unique culture and environment of the Texas-Mexico Border. Our purpose is to reunite Medicine and Public Health (STEER, 2011).

Each summer, MD/MPH students from San Antonio head to Laredo and Harlingen to experience first-hand the intersection of public health and medicine through a real world study in environmental health. Read the summaries below to learn about the STEER program through the experiences of UTSPH students.

http://steer.uthscsa.edu/index.aspx
Public Health Significance

My practicum experience was mostly linked with the Public Health Essential Service of assuring a competent public health and personal healthcare workforce. Most of the individuals in my cohort were students who were seeking to gain more knowledge about public health and how it affects those living in underserved communities of South Texas. Lectures on pesticide usage, indoor air quality, and community health centers all touched on a different aspect of public health that can be easily applied to my future practice as a physician. Even more humbling, was having the opportunity to go out into communities known as colonias, and physically see the barriers and challenges that exist in disadvantaged communities. Nevertheless, the task force of community health care workers, promotoras, is helping to close the gap in health education and resources. Exposure to these health care inequalities and service programs, have shaped my public health knowledge and desire in the direction of wanting to improve health awareness to other similar communities.

Reflections of South Texas Border Health

By: Kelechi Anyaehie

This past summer I had the opportunity to be a participant in the STEER (South Texas Environmental Education & Research) program. This enriching 4-week experience was spent in the Texas- Mexico border cities of Laredo and Harlingen Texas. During my practicum I was able to gain and expand my knowledge about the environment and culture that help shape the health of the mostly underserved cities of the Lower Rio Grande Valley. Most of my time was spent actively engaging in lectures and applying what was learned to different field sites for a more hands-on approach. This program was aimed at exposing students to the different aspects and challenges of health along the border. The final product, in the form of a reflection paper, described my experiences and findings that efforts are increasing to bring more attention and resources to eliminate barriers of border health.

Special events

- Visiting colonias in the Lower Rio Grande Valley
- Evaluating water samples for coliform bacteria taken from the Rio Grande River
- Visiting a detention center for illegal immigrants and learning about the medical screening process

"Border health provides an amazing combination of the environmental, cultural, and community aspects of public health."

Performing lead checks on pottery common to many homes in the Lower Rio Grande Valley.
Looking more closely at the border’s healthcare system

By: Yousef Arar

I found it interesting to look at the way the healthcare system is shaped based on the government and regulations in place. We spent most of our time in Harlingen going to different community health centers and asking the workers different questions about their everyday life. We also spent one day in a dialysis unit talking to patients about how they might have been affected by different toxins in their community, home or work place.

In Laredo we had a physician who previously worked in Mexico as one of our supervisors. He was very open with all of us and discussed the different troubles he had during his time in Mexico.

Since the program no longer travels to Mexico we were not able to see their healthcare system first hand. However, Rodolfo Rincon did a wonderful job explaining his situation.

**Practicum Highlights**
- Talking with patients at a Dialysis unit
- Visiting three different colonias
- Dr. Rincon’s lecture.

Public Health Significance

Understanding how border health operates and the difficulties that arise when dealing with underserved populations is very important. Understanding how the system works in person is something that will prove very valuable to my future as a physician.

From the public health essential service list I would say that this portion of STEER was most closely tied to monitoring, developing policies and plans, linking people with personal health needs, and evaluating effectiveness. I learned the most when I actually get to go out into the field, meet people, and discuss their situation instead of reading about it in a book. I really enjoyed debating with my peers, professors, and locals about the pros and cons of their healthcare system.

I would have never gained insight into how a poor community deals with its healthcare system if it were not for the STEER program. It really opened my eyes to the need of competent physicians to travel to underserved areas. I am much more likely to serve in an underserved community because of my experience with this program and the insight gained during my time in the valley.

“A friend of mine in Mexico is forced to pay the cartels a monthly fee to keep his office open and family safe”.

- Rodolfo Rincon M.D. M.P.H.

Rodolfo Rincon M.D. M.P.H. sitting in a classroom in Laredo
How the Border Can Prepare Us for a Future in Healthcare

By: GREGORY ASHTON

STEER provided us an opportunity to learn about a variety of public health issues. From the very start we were introduced to the low-income colonias and the hardships these people face in terms of clean water and access to health care. Experience with health promoting promotoras, small groups with limited funds that reach out to these communities and facilitate educational action to better health outcomes. We took an in depth look at the Autism rates along the Texas border and discussed why they would be lower than the U.S. average. Is it that the prevalence is not adequately represented to lack of diagnosis from sub-standard care? Or, is there some protective factor indigenous to the border? We became involved with the Harlingen staff in order to address this question. The ability to do exposure surveys on actual dialysis patients was a crucial part of our education and will serve us in our future in healthcare.

Public Health Significance

The STEER program relates to several Essential Public Health Services.

“Monitor health status to identify community health programs.”

In STEER we had the opportunity to test the quality of water in the Rio Grande, the lifeline water supply to millions along the border.

“Inform, educate, and empower people about health issues.”

We had the opportunity to see promotoras in action and the effect they have in bettering health in the colonias.

“We link people to needed personal health services and assure the provision of health care when otherwise unavailable.”

We saw first hand the impact Community Health Centers have as the primary health outlet for low SES families.-

http://www.apha.org/programs/standards/performancestandardsprogram/resessentialservices.html

“The border isn’t some foreign land with problems far dissociated from our daily life, the problems are acutely relevant and serve as an enduring reminder of the issues facing our failing healthcare system”
A Summer in South Texas

By: Kelly Campbell

A month ago, I did not know what to expect from the STEER program. When asked by our medical classmates or family members, my peers and I would simply shrug and say, “Oh, I think we’re taking water samples”. Imagine my surprise then when in those first two weeks we not only took water samples, but also learned about herbal medicine, local wildlife, diseases endemic to the area, air quality, health care options, colonias, mosquitoes, and more. The excitement with which I anticipated each day rivaled that of my elementary school field trip days. It has been a very long time since learning felt so rewarding. In medical school we are expected to show up, memorize as much information as we can, and occasionally participate in a group activity. At STEER, the small group size and personable lecturers engaged each student in the room, encouraged problem-solving, and inspired.

Public Health Significance

While STEER illustrated many of the public health services, none were more present to me than “Assure a competent public health and personal healthcare workforce.” Through our experiences, my medical school classmates and I saw the framework of a very vibrant, active public health environment designed to adapt and meet the unique challenges of the border. Not only did we witness the strength of public health in the community, but we were able to clearly see how we would one day be a part of the infrastructure.

One of my favorite experiences of STEER was the day we explored herbal medicine with Tony. He helped us understand what questions to ask our patients and reminded us to have the foresight to encourage a respectful, open conversation with them about their beliefs and medical practices.

To me, the competency of Laredo and Harlingen’s public health community was epitomized by the zest with which each organization targeted multiple aspects of health, providing a complete umbrella of care ranging from diabetes prevention to vector control to water sanitation and beyond.

Some Memorable Days:

- A visit to the detention center
- Mosquito collection and identification of potential pathogen-carrier
- A shopping challenge: Buy a colonia family a week’s worth of groceries with $50

“Not only did we witness the strength of public health in the community, but we were also able to clearly see how we would one day be a part of the infrastructure.”

Preserving nature on and off the job - herbal medicine expert Tony show us the nursery of tortoises in his backyard.
ICE Homeland Security Detention Center. We found that the US policy is misguided and our money could be better spent using the model of the Bracero program from the 1950s.

Experiences only available at STEER

- Visit Colonias and learn about the improvements that have been made in the last 25 years
- Learn about water pollution from a scientist with the EPA

Public Health Significance

STEER helps public health students experience a variety of public health fields, from border health to environmental health, through hands-on activities that enhance learning. All of the guest lecturers are experts in their field who live on the border and understand the unique blend of Texan and Mexican cultures that exists there.

Culture is another area of public health that frequently gets overlooked. Through meeting with Promotoras, health workers who meet with patients one-on-one to improve compliance, it’s clear that an understanding of culture is vital to meeting health needs in the community. A visit to a Community Health Center also helps students understand the resources available in the United States to an impoverished community.

Environmental health is a focus of STEER too and students will become aware of its importance through meetings with patients who had a pollution-based illness to lectures from Dr. Claudia Miller, an expert in the field. By visiting an air pollution monitoring station run by the EPA, the lessons learned in the classroom are “brought to life”.

“The population seen on the border is what the entire country will look like in 30 years” – Dr. Joeseph McCormick
We went to the Santa Ana Wildlife Refuge to learn about preservation of plants, animals and the environment. This refuge is located in the lower Rio Grande valley. It has species unique to this region of the country such as the ocelot and many species of birds at this refuge.

We were working on multiple topics at this site. We went over plant and animal conservation. We also talked about difficult this can be on the border where border security takes precedence over endangered species and wild life preservation.

Our instructor showed us a powerpoint over the refuge, it’s goals, struggles & how they overcome these challenges.

This experience taught me how difficult it can be to look out for plants and animals when human interests are involved. It takes a lot of hard work, creativity, and dedication.

**We got to tour the refuge and see some of the amazing creatures they are helping to protect!**

- I loved seeing the animals the refuge helps to protect and also getting to see them in their natural habitat instead of at a zoo.

One of the ocelots that can be seen at the Santa Ana Wildlife Refuge.

*Photo from U.S. Fish and Wildlife*
The South Texas Environmental Education and Research Program (STEER) was a great opportunity to see the vast public health issues being tackled along the US-Mexico border. Along with several other classmates, I spent 2 weeks in Harlingen and 2 weeks in Laredo. We focused on community-based projects that were addressing the needs of the people of South Texas as well as the issues that were not being addressed. We visited everywhere from a detention center to a sea turtle rescue hospital to the border wall itself. We learned that even some of the most unexpected organizations, such as the zoo, can have a big impact of public health. We also visited a few colonias and had our eyes opened to one of the most underserved populations in the country. One of the most interesting topics to me was controlling the spread of infectious disease by controlling the mosquito population.

Mosquitoes are famous for spreading a variety of infectious diseases across the globe. In South Texas, the increasing incidence of Dengue Fever is a growing cause of concern. One of the best ways to prevent future cases of Dengue is to control the mosquito population. All mosquitoes like to lay their eggs in standing water. There is quite a bit of standing water in the colonias from water barrels and unused tires (see picture above). By removing these water sources, we can slow the growth of the mosquito population. The public needs to be educated on the importance of controlling standing water sources. Dengue is carried by the Aedes aegypti mosquito. Various mosquito species larvae are fairly easy to distinguish under a light microscope (see pictures right). It is important for public health professionals to monitor the types of mosquitoes in their regions to predict the potential spread of vector-borne infectious diseases.
Public Health Significance

Of the 10 essential public health services, STEER seems to cover all of them to some extent. However, I think that most prominent is informing, educating and empowering people about health issues.

STEER presents many programs whose aims are to inform, educate and empower people about health issues. We were exposed to promotoras whose jobs were to go into the community and educate about harmful exposures and disease risks. We also visited clinics whose goal in treating patients for diseases like diabetes was to educate the patients and help them change their lifestyles. We learned about the importance of mosquito control in order to stop the spread of infectious diseases. We learned about the importance of cultural traditions and herbs used to treat health problems and how they might interfere with westernized medicine and drugs. Overall, we learned about many of the border health problems and the programs that have been set up to try and stop them.

Learning about the importance and the need for public health close to home

Lasting Experiences:
- Collecting water samples from the Rio Grande
- Visiting the colonias around Laredo and Harlingen
- Visiting the immigration detention center

STEER - A General Overview of What Public Health is

By: Stephanie Lynch

During STEER, we were exposed to a broad spectrum of public health issues through lectures and field trips that are important in the South Texas region. We visited clinics for underserved populations and learned about education programs that they have in order to help treat diseases such as diabetes. We learned about environmental health problems such as the use of pesticides around young children who are then exposed to them. We learned about the importance of mosquito control in order to stop the spread of infectious diseases. We learned about the importance of cultural traditions and herbs used to treat health problems and how they might interfere with westernized medicine and drugs.

Tying ribbons on a wishing tree while learning about herbal medicine in Laredo

Collecting water samples of the Rio Grande

Summer 2011 • Stephanie Lynch • Laredo/Harlingen • STEER
Public Health Significance

The STEER program covered several aspects of the Public Health Essential Service(s) (PHES), but there was an emphasis on informing, educating, and empowering students. As future health care professionals, it is important that we remain aware and educated on the issues that will be directly affecting our patients. Learning what to look for and what questions to ask when taking a patient history is the first step in making a correct diagnosis.

Disease Control on the Border

By: Melody Muñoz

During the four week practicum, I learned about environmental and social factors affecting the health of residents living along the U.S.-Mexico border. Issues addressed include the consequences of sharing a water source with Mexico, and the high amounts of disease-inducing bacteria found in certain parts of the river, as well as the breeding of malaria-carrying mosquitoes due to poor maintenance of yards and disposal of trash and old tires.

Other aggravating factors include an inability to track disease crossing the border, and the poor state of plumbing and electricity found in the colonias.

For the final presentations, my partner and I focused on the adverse effects of pesticide exposure in different populations.

Preventing & Containing Disease on the U.S.-Mexico Border

The contribution of an individual’s environment on their health is magnified in settings like border towns, where different standards and regulations and continuous crossing of the border perpetuate illness.

Student exposure to these issues allows for more thoroughly educated and prepared future healthcare workers.

STEER Highlights

- Zoonotic Disease Discussion with Gladys Porter Zoo veterinarian
- Water sampling for bacteria on the Rio Grande
- Mosquito collecting and microscopic classification of disease-carrying vectors

Zoo veterinarians work with physicians in looking for new strains of infectious disease that could infect any of the species in their care


Photo courtesy of STEER Laredo.
STEER Education and Recycling

STEER and the Benefits of Recycling

By: Kathlyn Parr

I participated in the South Texas Environmental Education and Research (STEER) practicum experience. In this program, we spent two weeks in Harlingen and two weeks in Laredo, learning about environmental factors that influence healthcare. Each day provided new insight into everyday health hazards as well as methods for reducing the risk to the public.

In our final research project, we discussed the potential for recycling along the border region. Part of the motivation for this project was due to the piles of unused tires sitting in neighborhoods we visited. In addition, our visit to the Donna landfill showed an abundance of recyclable materials being buried. After conducting some research, we concluded that recycling would be an advantageous addition to the border Colonias, but may require some additional infrastructure before becoming plausible.

Public Health Significance

The STEER program provides a great contribution to public health through the education of future physicians and public health practitioners about the variety of health risks and disparities that occur along the border region. This falls under the “inform, educate, empower” category of the 10 Essential Public Health Services.

There were a variety of experiences that contributed to this learning. However, there were a few that I found particularly significant for my career:

1) Visiting a detention center and discussing the prevalence of tuberculosis and other illnesses among inmates.

2) Analyzing mosquito breeding areas and learning about the increasing incidence of vector-borne illnesses such as Dengue Fever along the border region and moving northward.

3) Learning about Rabies and the eradication programs occurring to reduce the risk of infection.
A Step Outside the Classroom

STEER: A Gateway to the Practice of Public Health
By: Ryan Peterson

In STEER there is a tight schedule to follow during the day, with free time in the evening. No two days were much alike. From learning to sample water from the Rio Grande River, to visiting with and learning from community members who lack electricity water, we gained valuable “hands on” experience.

Many of our teachers were volunteers. Whether at a nonprofit group or with a scientist teaching about zoonoses, there was a sense we got that our understanding and being able to retain the knowledge was important. They valued our learning.

The hands on training using equipment to identify environmental risk factors in community housing and work environments was paired well with the more academic portions of the course with parallel information. This gave me more confidence in informing and educating others in my community both now and in my future role as a physician.

By visiting nonprofit organizations and sitting down with the managing parties of a community health center, I learned about the different ways to link impoverished people to health care providers.

I was allowed to choose a topic to explore more in depth and to present my work. I chose autism not only because of my interest in neuroscience, but because we had the privilege of meeting with parents of children with autism, which made me want to learn more.

By giving us medical students such valuable exposure to a wide array of hands on experiences and personal connections, the school of public health empowers us to connect with the community in ways which we cannot learn in the classroom.

• Close interaction with members of the community
• Hands on training in the core disciplines of public health
• Individual learning project and presentation

Getting instructions on how to get good data from the river
Public Health in South Texas

South Texas Environmental Education and Research
By: Kristy Smithson Riniker

The STEER program offered me the opportunity to learn about and experience first-hand a variety of public health projects in south Texas. One of the recurring themes was that the Rio Grande Valley is one of the most medically underserved areas of the United States. In addition the population experiences disproportionately high rates of diabetes and obesity.

We met with leaders in the community addressing the health issues through a variety of venues - education, health care, and religious organizations to name a few. We learned about cultural factors that influence health, as well as the financial and legal barriers to access to care. STEER opened my eyes to health care in south Texas and showed me that I may want to practice medicine there in the future.

We took exposure histories from patients at the dialysis center and found that many had been exposed to chemicals that may have played a role in their kidney failure.

Public Health Significance
Monitor: Rio Grande water quality testing, exposure histories
Investigate: Prevalence of diabetes, obesity, and autism among south Texans
Empower: Learn about programs such as CATCH that empower the community through children to live healthier lives
Mobilize: Meet with community organizations working for public health

We took exposure histories from patients at the dialysis center and found that many had been exposed to chemicals that may have played a role in their kidney failure.

Highlights
- Spending time in the colonias
- Visiting the ICE detention center
- Learning about curandurismo and alternative medicine
- Acquiring knowledge of wild plants that can be used for medicinal purposes

“My time in Harlingen and Laredo introduced me to a version of Texas I will never forget.”
STEERing my practicum South

STEER: an eye opening experience at the Texas-Mexico border

By: Rachel Sosland

I participated in the STEER program for my practicum experience this summer. I, along with seven other students, spent two weeks in Laredo, Texas and two weeks in Harlingen to help better understand the environmental and public health issues that affect the border region.

My experience in Laredo was more geared toward learning about the environmental components of population based medicine. Some of our activities included sampling river water from the Rio Grande, visiting animal control shelters, and going to a ranch to learn first-hand about local herbal medicine from an expert.

In Harlingen, the curriculum was focused less on the environment and more on social and community aspects of health. We spent time in a detention facility and visited colonias and superfund sites to see how they were affecting the community.

Public Health Significance

I think the strength and uniqueness of the STEER program lies in the fact that we were exposed to experiences that we may never have again. We visited facilities and public health programs to gain exposure to new and innovative ways of tackling public health issues. Many of these facilities I would not have found on my own, and therefore I feel like I am at an advantage because of my knowledge, no matter how small, of certain areas of our government, environment, and public health system. We monitored water quality in the Rio Grande, visited with numerous organizations who are empowering communities to fight for access to government services, and investigated environmental and health issues in some of the poorest areas of our country.

I now feel armed with knowledge of new ways to reach a population in Texas that truly needs my help!

Highlights of STEER:
- Participating in building a market basket with a local family
- Taking environmental exposure histories from dialysis patients
- Visiting colonias in the South Texas border region

“It is tragic that a group of people so focused on global health was so unaware of a third world environment right in our own backyard.”
Along the Border

“Colonias” along the U.S.-Mexico Border
By: Aida Vigil

Imagine yourself on a dirt road, children running around barefooted in their muddy yards, no running water, and houses made out of leftover scraps of material. This might sound like an image from a third world country, but it’s something that some people in the U.S. face every single day. These people live in what are called “colonias,” mostly along the US-Mexico border.

This summer at STEER we visited several of these colonias and met some of the people who live in the midst of this poverty in a country with such wealthy resources. It wasn’t so much the negative aspects of their living conditions that affected me however, but rather the ways in which the community along the border works together to provide for those who need it most. The variety of programs we were exposed to demonstrated the importance of public health interventions for people with low resources.

Public Health Significance

Diagnosing and investigating health problems and health hazards in the community is one of the ten essential public health services that makes up an effective public health system. During our time at STEER, we visited colonias and spoke with residents about their needs. We also learned about programs offered through community health centers to inform, educate and empower people about health issues and how these are changing the lives of those in the colonias. Programs like the diabetes education classes offered by Mike Treviño through the Gateway Community Health Center, or those offered through Proyecto Juan Diego by Sister Phyllis Peters are among those that are changing the way people live with and fight against diseases like diabetes. Engaging with these community leaders during STEER empowered me to pursue a career in medicine and public health that will allow me to take part in the lives of those with the most need.

“How wonderful it is that nobody need wait a single moment before starting to improve the world.”
- Anne Frank

Students on the last day of STEER-Laredo cohort.

STEER highlights

• Water sampling at the Rio Grande
• Medicinal herbs in South Texas
• Visiting Colonias along the border

Learning about bacteria and organisms living in the Rio Grande River.
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/