Public Health Practice

Stories from the Field
The University of Texas School of Public Health
Student Practicum Experiences
Summer 2014 – International
The practicum experience is an integral part of the MPH and DrPH curricula. 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 fourteenth-edition e-magazine showcases student practicum experiences throughout the Summer 2014 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:** 11

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#### International Practicum Experiences

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Clinical and Public Health in the City of Aleta Wondo, Ethiopia

In the rural area of Aleta Wondo Ethiopia, I had the opportunity to do some clinical as well as some community based work. With the help of the local based non-governmental organization, Common River, I was able to assess different illnesses and clinically treat many individuals in the community. I was also able to do some field work by going out in to the community assessing the current issues as far as health access, traditional healers versus allopathic medicine, and common diseases that are present in many households. The public health issue that we sought to address was community empowerment and addressing some health disparities that were heavily present. Our host organization really believed in getting out into the field and interviewing the people who live in the community. We really wanted to get a basis of what they thought were pressing issues surrounding their health and wellbeing. Some of my specific duties included interviewing and interacting with patients in the clinic and community setting and passing on knowledge to people in the community about treatments that do not require as many resources such as the water, salt, and sugar mix to treat diarrhea. I also diagnosed and treated my share of patients that were seen in the clinic. One of the major projects that we were working on was evaluating the use of allopathic versus clinical medicine. We haven’t finished analyzing the results but thus far it looks like allopathic medicine is the preferred first line treatment, however, traditional healers are used commonly.

Public Health Significance

Some of the public health Essential services that we were able to incorporate in our trip included, diagnosing and investigating health problems and health hazards in the community, informing, educating, and empowering people about health issues, mobilizing community partnerships to identify and solve problems, linking people to needed personal health services and assure the provision of healthcare when otherwise unavailable, and researching for new insights and innovative solutions to health problems. For example, we spent a good portion of our field work teaching about some common health practices that can help reduce the incidence of common diseases such as trachoma due to flies in the eyes. We also made sure to inform them about the local clinics and what services that they provide there. We had a round table with local traditional healers and saw how we could work with them when it comes to utilizing healthcare services.
Leachate Treatment
By: Sara Barge

My practicum consisted of living at Xiamen University of Technology (XMUT) for the months of June and July. My group consisted of ten students from the LBJ School of Public Affairs and one other student from UTSPH. We were each paired with a student from the university and each researched different topics related to municipal solid waste management in China. My area of interest pertained to evaluating different treatment methods utilized in the U.S. for leachate and analyzing which methods could be applicable to Xiamen. During our stay, we took fieldtrips to landfills, incinerators, and composting facilities. This allowed us to ask questions from specialists and our partners would help translate when necessary. I narrowed my research to relevant topics that included information on membrane bioreactors, ultrafiltration, and reverse osmosis. At the end of our stay we gave a presentation with our partners to faculty and specialists in MSW from Xiamen to present our findings.

Public Health Significance

Leachate is hazardous liquid effluent waste from landfills. It results from rainwater and water from waste. It is considered hazardous since it contains ammonia-nitrogen, heavy metals, chlorinated organic and inorganic salts. If the treatment of leachate is insufficient or poorly executed, leachate can contaminate drinking water.

My area of research deals implementing the best treatment of leachate, in Xiamen, to prevent this problem from occurring. This aims to increase the quality of life of those affected in the community, by providing the basic need of clean water.
Our team of 4 medical students traveled to Bandung, Indonesia to collaborate with the community-based organization Rumah Cemara to conduct structured interviews with clients and staff workers to address gaps in drug rehabilitation services in June 2014. While our primary realm of work was in substance use (heroin, methamphetamines, cocaine), and addiction, we uncovered that sexual education was lacking in this community. We also conducted health education and counseling sessions on adherence to therapy for HIV-positive patients, women’s health, nutrition, and sex education. We approached these sensitive topics cautiously, with empathy and with a systematic way of structured interviewing, based on literature review. The host organization tackled stigma of addiction through peer support, and spirituality. The major findings were that health education sessions coupled with contingent counselor-client relationships were crucial to improving quality of life during the process of recovery.

**Public Health Significance**

Our project evaluated effectiveness, accessibility, and quality of personal and population-based health services by catering to a community focused on fighting addiction within a conservative society—this meant improving resources, relationships, education, and services of an individual to prevent relapse. This also means empowering and changing the status quo for those closely associated with addiction, including the marginalized drug users, sex workers, transgender population and their partners and families. We implemented a semi-structured qualitative interview, using evaluation methods to analyze data within the context of their society and values. Rumah Cemara changes the way HIV and addiction is viewed in conservative Muslim Indonesia by coordinating sports competitions to involve both HIV-positive and negative in friendly competition, as a basis for education and empowerment. Prevention and empowerment of those recovering from drug use and addiction bolsters the quality of life of people living with HIV.
Healthcare Highlights of Aleta Wondo

Public Health Significance

Many of the essential public health services were emphasized with this project. We were able to diagnose and investigate health problems in the community by running a free clinic in the area. We were able to inform, educate and empower people about health issues such as the spread of Trachoma and the basic at home treatment for diarrheal illness. We were also able to evaluate the effectiveness, accessibility and quality of personal and population based health care services by setting up our clinic with the compound of the local government clinic. This allowed us to treat many patients and to identify missing links in the quality of their care. For example: While treatment for the most common illnesses is free in the government clinics, the tests to identify if the patient has this illness still costs the patients. Instead of running the tests, patients end up being broad-spectrum treated for a variety of illness. This healthcare practice is indirectly causing a considerable effect on the community.

Southern Ethiopia: Healthcare Challenges and Successes

BY: Mia Gonzales

During the time that I spent working in Southern Ethiopia, I had the privilege of seeing patients at a local clinic under the guidance of two physicians. It was in my time at the clinic that I was able to evaluate the challenges that Ethiopians face when they are trying to obtain access to care - namely, distance to a government clinic, and having the monetary stability to obtain care once they have found a clinic. I was also able to observe the success has had in treating TB, malaria, and hepatitis, three of the most common illness in the area. The contribution that our team made to the area, besides treating patients, was to conduct research on common health practices and beliefs in the area in order to further understand the health needs of the population. I was also able to obtain a valuable understanding of how much a living in a close-knit community can affect health care knowledge.

Lessons Learned

When treating people in another country always enter with a sensitivity toward their culture, their belief systems, and maintain an open mind in order to fully understand the scope of their challenges.
I developed a research protocol with two other medical students to investigate the protozoan parasite Entamoeba histolytica and its potential associations with HIV in rural Basotho populations.

We worked closely with a small hospital serving a rural & mountainous catchment area to enact our protocol, under the guidance of the Offices of Global Health at UTSW Dallas and the Ministry of Health Lesotho.

Unfortunately the project proved to be more than we as aspiring researchers could accomplish in just the summer weeks. My team and I were unable to complete our objectives, but we learned a tremendous deal about international collaborative work from this challenging experience. We haven’t given up yet.

The hospital at Mamohau. The cold winter mountains provided a beautiful backdrop to every scene at site. (photo: Ryan McClaine)

**Practicum Highlights**

- Making friends in the Ministry of Health Lesotho to promote future project development
- Learning about the nature of access to health care in rural, mountainous Lesotho.

**Lessons Learned**

- Always trust your gut instinct! If you have invested a great deal in a project, you likely know the best way to move forward. There may be times when it is right to challenge the wisdom of well-meaning superiors, as they likely will have a less nuanced understanding of the project than you.

**Public Health Significance**

My host site, Mamohau Hospital, is a rural hospital serving a catchment nestled in the central mountains of Lesotho. The hospital is involved in nearly every aspect of public health for the region, from monitoring to evaluation. It was a tremendous experience to see how limited personnel and resources can be used in different ways to best suit the needs of the population.

Research is the only public health goal the hospital is not equipped to contribute to on its own. Research is not a luxury such a small hospital can afford, as their resources and efforts are spent tackling the immediate issues before them. This is a common theme in the developing world, where present pressing issues are so important that there is rarely opportunity to investigate and prepare for the future.

This is why I want to continue to be involved in rural international research. There is a tremendous natural gap in our scientific knowledge for catchments similar to Mamohau. A little effort in developing research in these environments could go a long way in rounding out public health efforts in the developing world. (photo: Ryan McClaine)
Public Health Significance

My three months as M&E Intern in Dakar were dedicated to increasing the capacity of Peace Corps Senegal’s public health significance.

First and foremost, my goal was to improve Peace Corps Volunteers’ ability to evaluate effectiveness, accessibility, and quality of personal and population-based health services. My research identified the barriers that volunteers face to collecting and reporting high quality data. Recommendations included steps to change the organizational culture around M&E, materials to streamline data collection and reporting, and training to improve volunteers’ attitudes, knowledge and skills of M&E.

M&E Capacity Building at Peace Corps Senegal

BY: PETER MORRISON

Since early 2013, Peace Corps Senegal has worked to transform its Monitoring and Evaluation (M&E) policies and practices to improve data quality and organizational learning. Despite significant effort, Peace Corps continues to encounter many challenges with the quality of their data.

This summer, I set out to understand why volunteers are misreporting data, and to make recommendations for how Peace Corps Senegal can improve the process. I began with a desk review and continued with data quality assurance interviews with Peace Corps Volunteers in their villages. This led to my final report and presentation to Peace Corps staff, which included an overview of the bright spots and challenges to high-quality, and an action plan to improve the organization’s M&E moving forward.

Field Research to Guide Organizational Change

After submitting my final report to the Director of Programming, I presented the report to senior staff the following week. During the presentation, my supervisor informed the room that she had already spoken with Peace Corps headquarters about the report and that several of my primary recommendations were underway.

Take Initiative & Be Self-Directed

Receiving limited direction is a common challenge among interns. If a supervisor is providing limited guidance or not delegating enough work, take the initiative to suggest projects, be self-directed in your work, and get creative in how and from whom you request support.
Cognitive Interviews with Uruguayan Adolescents

Cognitive Testing of Two Survey Instruments

By: Erin Peterson

This project involved cognitively testing 2 survey instruments in Spanish with students in their first year of High School (ages 12-13). In the end, I interviewed 38 students over the course of 4 weeks: 19 students completed a survey about tobacco use and 19 students completed a survey about physical activity.

The interviews were conducted to determine how well the students understood the questions and as such, there were no “right” or “wrong” answers. Even though this was explained, many students still tried to give the “right” answer and acted as though the interview was a test. While I made every attempt possible to explain that the questions are about beliefs and perceptions, this was still a difficult concept for the respondents.

There were issues that arose with several questions from the survey instruments. I found the most interesting of these to be their confusion about the race and ethnicity questions. Several students paused during the survey to look at their hands when answering whether they were “white”, “black” or “mixed.”

Public Health Significance

In the Essential Services of Public Health, this practicum experience most closely falls under the category of monitoring.

The purpose of this project was to determine whether students understand the questions on the survey in the manner in which they were intended to be understood, to learn whether the answer choices are reflective of the students’ answers and to ensure that the data from the survey instruments are reflective of what the researchers are testing.

We partnered with CIET (Centro de Investigación para la epidemia del tabaquismo) in order to create an intervention aimed at decreasing tobacco initiation and increasing physical activity in adolescents.

Duties during practicum

- Consent forms in English (for IRB) and Spanish (for participants and their parents)
- 2 waves of approximately 10 students each for each of 2 survey instruments
  - Wave 1: to understand which questions are difficult for the students. To gain an overview of the cognitive processes of the respondents
  - Wave 2: to delve deeper into the problems with the difficult questions

Advice for Future Students

- Get all of your prep work done before you travel for your international practicum!
- Schedule a one-on-one meeting with your community preceptor to talk about the logistics of your project in advance of your travel
WASH Survey in Xela, Guatemala

Practicum Highlights

- Having the indigenous community allow the research group to enter their households for direct observation of the latrine and kitchen was a very humbling experience.
- The process of data collection, analysis, and identifying potential areas of intervention based on results allowed practice of MPH book knowledge.

Lesson Learned: PH requires us to be resourceful and adaptable

A pattern noticed while completing public health fieldwork was that I wanted to apply book theories and knowledge to human interaction in a very rigid manner. Self-reflection allowed me to identify this pattern; it subsequently enabled me to identify that public health required that I be adaptable and resourceful.

WASH Knowledge and Practices within Rural Guatemala

By: Monica O. Ruiz

A water sanitation and hygiene (WASH) survey was used to assess the knowledge, attitudes, and practices in the Xela. This indigenous population resides in the Guatemalan highlands. The WASH survey consists of 62 questions: 17 questions analyze WASH practices, 24 questions were direct observation of the household, 6 questions assessed their WASH knowledge.

I completed my practicum with 4 medical students from UTHSCSA.

Public Health Significance

The group divided into 2 groups and completed home visits for 5 days. As the MD/MPH student of the group my job was to assure the IRB protocol was followed and to complete the data analysis.

The data gathered has been analyzed and is awaiting approval for conference poster submission.

A finding of interest and potential point of intervention was the lack of knowledge on skin hygiene.

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The typical multifunctional washing unit in Xela. Used to wash clothes, dishes, and their hands.

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ORGANIC WASTE MARKETS/
Solid Waste Management

Commitment to Zero Waste: Global perspectives transforming organic waste potential by Joanna Saucedo

Jimei, Fujian Province, China. Sunrise illuminates the sky just after 5:30 in the morning. My job is to navigate the road of organic solid waste markets in Chinese and English with my research cohort in the Environmental Engineering Department at the Xiamen University of Technology (XMUT). Since my Chinese is non-existent, I call her by her English name, Jessica. There is no official translator for our program and since Jessica’s spoken English is limited we work slowly, supplementing our spoken banter with WeChat (a mobile communication service), a more reliable option than email in China. Internet access is not very consistent, even with a VPN (Virtual Private Network) connected by the third week. Therefore, making phone calls and visiting people and businesses related to this project is imperative. With persistence, a field trip and meeting with an organic waste purchaser and processor, Xiamen Rojust Biotechnology Company, has been secured. Rojust and a local restaurateur (Josh Lathrop of the Brewhouse Restaurant and Pub) provide insight into current practices regarding organic waste in China.

Much to my surprise, our inquiries reveal that the Chinese government is instrumental in subsidizing current advancements and is already funding several 6 to 20 ton food waste processing units for universities and other large government agencies. These machines utilize a 26-component probiotic substance to promote a biochemical process that digests all food waste, including components not typical in standard composting such as bone, animal products, and fats. Oily fraction, solid mass, and fluid are separated from the waste, in order to generate fuel and compost for company use and commercial sales. Local businesses are paid for their oily fractions. Solid waste is collected free of charge from restaurants, in order to make fuel and compost.

Public Health Significance

The Public Health Essential Services most related to this project include evaluation and research, appropriately matched to my role as a solid waste management project investigator coordinating topic exploration with an academic institution, XMUT. Our joint efforts elucidated current practices in Municipal Solid Waste, hopefully helpful for future waste processing choices.

Son Jarocho Fandango community building class

Teaching Son Jarocho Fandango, a musical form from Veracruz, Mexico, to build a support network for creativity and global awareness was a rewarding peripheral project allowing me to bond with XMUT students and staff on an even deeper level than research alone.

Students will continue to take classes via Skype!

Advice: Study Abroad

Assess the emotional and social tools that you need on a regular basis in the US. Pack accordingly. Emotional balance enhances the educational experience and overall satisfaction.
Drug Addicts: The Recovering and Recovered
By: Monica Sok

Bandung, Indonesia. My team and I worked with Rumah Cemara (RC) who works with helping drug users recover and fighting the discrimination against HIV/AIDS. For many weeks, my team and I worked on research that evaluated RC’s treatment services. We interviewed clients at the treatment center, clients post-treatment, and counselors at the treatment center with the help of our wonderful translator.

During our interviews, we were able to identify a gap in the clients’ knowledge: lack of sexual health information. Because of this gap, we also held a week of education sessions. We taught nutrition, STD’s, and women reproductive health. We also managed to finish all of our interviews and create a final report for RC. Our results involved the need for education for the counselors, a system for client follow-up, and a need for a sexual education curriculum.

Public Health Significance

The following Essential Public Health Services was most relevant to this practicum experience:

1. Inform, educate, empower – One of the best powers public health has is education. Unlike many interventions, education has the power to change an individual or a community if done the right way. Sexual health is a very taboo topic in Indonesia. Thus one of my most rewarding experiences was being able to hold sexual education and women reproductive health sessions with the clients. Many of the women do not have access to preventative services there and do not receive mammograms. Sexual health is absent from education there.

2. Diagnose and investigate – Public health centers around digging for the gap and what is lacking in that area. This is all done through research and interventional work abroad. The primary purpose of my practicum was to evaluate the services at the treatment center. Through the interviews and my discussions with different people at RC, my team and I were able to identify different issues and what was lacking in their treatment services and provide suggestions.

Advice for Future Practicum Students

The practicum is a time for students to step out of the classroom. It is an opportunity to apply the knowledge you’ve learned in classes and gain a real-world experience of the difficulties and rewards of implement public health projects. My advice is to always go into these projects with a very open heart and a flexible mind. The people you work with will be the people you learn the most from.
Mortality in Colombia 2000-2011

Exploring Mortality and Access to Health Services in Colombia
By: Lauren Van Winkle

During my practicum, I worked at Pontificia Universidad Javeriana in Cali, Colombia. Over the course of the six weeks I was there I had the opportunity to sit in on some public health courses with the medical students, participate in public health practica at local health clinics in Cali, research inequalities and inequities in access to health services throughout Colombia and compile, clean, and explore mortality data from all regions of Colombia from the year 2000 to 2011. I spent the vast majority of my time working with the mortality data. In all, the unified database included nearly 2.5 million observations. In working with such a large database, I confronted many unique challenges and I was able to gain invaluable experience in this area. Further, I was able to develop my Spanish speaking skills in a professional context.

Public Health Significance

The Essential Services of Public Health that most closely related to my practicum experience were monitoring health status to identify community health problems, evaluating effectiveness, accessibility and quality of personal and population-based health services, and researching for new insights and innovative solutions to health problems. In analyzing mortality data, public health professionals can determine the most prevalent causes of death, identify temporal and spatial trends, evaluate effectiveness of policy implementation, and look for ways to reduce mortality in their geographical area of interest. I did not have nearly the amount of time I wanted to analyze the data, but I am looking forward to exploring infant mortality in Colombia for my thesis project.

Highlights

- Being immersed in a culture other than my own and learning to communicate effectively in another language
- Visiting the local health clinics and speaking with doctors, nurses, medical students, and members of the community

Advice for Future Students

- Don’t be afraid to pursue an opportunity that is outside of your comfort zone. Many times that is where the most growth and development occurs, both personal and professional.
For more information regarding The University of Texas School of Public Health, Office of Public Health Practice and the practicum program, please visit:

https://sph.uth.tmc.edu/practicum/