

SPH 5850-5855
Public Health Practice Experience
Poster Presentation Session

Abstracts

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CLINICAL RESEARCH SUPPORT AND DATA MANAGEMENT
AT BAYLOR HEALTH CARE SYSTEM

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The Institute for Health Care Research and Improvement is a multifaceted agency which conducts and supports research within Baylor Health Care System. Phase II clinical trials and clinical research are among the many projects in which IHCRI participates. Management of hospital data for research purposes and developing methods to capture data for phase II clinical trials are strictly regulated by the federal government. In addition to maintaining compliance across several agencies within the Baylor system in support of clinical trials, it was also necessary to validate procedural aspects of clinical trials and clinical research. These tasks included validating databases for clinical research, validating data capture forms for consistency with study protocols, validating data management software for other Baylor entities, and validating randomization schemes for clinical trials.

CHART REVIEW FOR RESISTANT *Acinetobacter baumannii* AND
VANCOMYCIN-RESISTANT *Enterococcus*

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Site Supervisor: Sylvia Trevino, MT(ASCP)SM, CIC

The Infection Control Department of Parkland Health and Hospital System in Dallas, Texas has seen an increase in the number of cases of Resistant *Acinetobacter baumannii* and Vancomycin-Resistant *Enterococcus* (VRE) over the past two years. The practice experience involved reviewing medical record charts of patients that had been diagnosed with one of the organisms to look for specific risk factors that the Infection Control Department felt were very important in hopefully controlling for these two organisms. The charts were reviewed for the risk factors specified during the admission dates that the patient had been diagnosed with the organism. Knowing the certain risk factors could help the Infection Control Department find out how these patients became in contact with these organisms by knowing the history of the patient. The data from the chart reviews were given to the Infection Control Department for further investigation.

REDUCING HEALTH CARE DISPARITIES IN DALLAS: THE OFFICE OF HEALTH EQUITY (OHE) - BAYLOR HEALTH CARE SYSTEM.

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The Baylor Health Care System (BHCS) Office of Health Equity (OHE) is committed to community health equity through a focus on reducing disparities in health care access, health care delivery, and health outcomes. The OHE designs, manages, and operates strategic interventions related to health equity improvement. As such, the OHE has developed a diverse portfolio of projects and programs focused on improving health care access. The Community Care Coordination (CCC) is a collaborative program that aims at giving access to vulnerable populations, raising their quality of health care, improve health outcomes and prevent costly emergency department visits and hospitalizations. The focus of the practicum was 1) to design CCC reporting systems for CCC PAD Patients, VPN Neuro Trauma Patients, and VPN Congestive Heart Failure Patients and 2) establish social and clinical reporting and outcome measures.

ENVIRONMENTAL INFLUENCE ON THE MALARIA VECTOR WITH GENE IDENTIFICATION AND PROSPECTIVE REMEDY FROM A RESIDENTS' PERSPECTIVE.

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Malaria is one of the three major infectious diseases in developing countries (HIV, TB, and Malaria). There is greater than one million deaths each year, which demands a novel methodology of malaria control. Malaria is transmitted by a mosquito of which population growth largely depends on environmental factors. To study the environmental influences on the vector mosquito at molecular level, we used PubMed to search the environmental factors and the effects they have on mosquitoes. Then, genes that are associated with the effect in mosquitoes or other organisms were searched in Entrez.

Results obtained show potential research areas or focuses in developing sustainable malaria control program.

The project provides ample experience in studying environmental factors, phenotypes, and associated genes that are essential components of environment-gene interactions where research in environmental health is highlighted.

TARRANT COUNTY JUVENILE DETENTION CENTER: AN OVERVIEW OF THE FACILITY AND SERVICES

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This poster describes the process used by the Tarrant County Juvenile Services System to admit, evaluate, adjudicate, and address the needs of juveniles charged with criminal offenses. In Texas in 2005, delinquent conduct occurred once every 7¼ minutes and approximately 40/1,000 juveniles in Tarrant County were referred to this system. An increased need has occurred for mental health services in this population, measured by the Massachusetts Youth Screening Instrument (MAYSI). We found that the highest number of referrals, in the year 2006, were in the age-group 14-16 years and in Caucasians. In comparison to females, males had a higher number of referrals. In 2006, the average daily population at the Detention Center was 71.5 youths; and the length of stay was 11.7 days. Our report includes trends in needs for improvements and a discussion of future needs and plans in Tarrant County for this vulnerable group of children and adolescents.

WOMEN'S HEALTH COMMUNITY ASSESSMENT, 2007: RISK FACTORS CONTRIBUTING TO HIGH INFANT MORALITY RATES IN SPECIFIC FORT WORTH NEIGHBORHOODS

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Site Supervisors: Dorian Villegas, MPH, Amy Raines, MPH

Abstract The Women's Health Assessment survey, conducted by the City of Fort Worth Public Health Department, was designed to help identify and address risk factors underlying the alarmingly high infant mortality rate in certain Fort Worth localities. Face-to-face interviews with 405 randomly-selected women of child-bearing age residing in Fort Worth neighborhoods that are burdened by a disproportionately high number of infant deaths between May and June 2007 are expected to reveal not only demographic characteristics but major risk factors that contribute to such problem. By identifying these fundamental issues affecting local at risk women, this data is expected to be instrumental in creating and planning Maternal and Child Health-related programs and services. Currently, such data is being analyzed by the Women's Health Assessment working group, and some of the preliminary findings are: 52.4% of all women lack health insurance coverage; 42.4% reported need for medical care in the last 12 months, but did not receive it due to financial constraints.

ANALYSIS OF AN URBAN OUTBREAK OF PERTUSSIS IN DALLAS COUNTY

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Site Supervisor: Calvin White, M.P.H., Epidemiologist

Immunizations are an essential element of health care interventions. However, many vaccine-preventable diseases such as Whooping cough (pertussis) continue to transpire among large communities. In 2004, the Dallas County Department of Health & Human Services (DCHHS) received 431 cases of pertussis. To study the impact of pertussis in the area, 49 track records were available from a sample of 50 cases. The proportion of cases that were either confirmed, probable, or ruled out/dropped was assessed. Frequencies and percentages of demographics such as race/ethnicity, age, gender, immunization status, and total time utilization were also determined. The study revealed that 24.5% of subjects were aged 18 years or older, which indicates that there may be a need for emphasis on adult vaccination. The study also showed that 47% of subjects were White-Hispanic, which may suggest the need for vaccine education in this particular demographic. Future analysis may be needed to observe the burden of pertussis in Dallas County in following years.

NOKIA Current State of Analysis— Occupational Health and Safety Project

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The current North America Nokia OHS Program Management has yet to be defined formally. OHS activities have been split between multiple departments and as a result ownership of particular processes is sometimes not clear or evident. Including, but not limited to program development, funding and vendor management, employee complaints and claim processing, emergency preparedness and communication/training. Because of this split there are multiple websites addressing different OHS issues that are sometimes conflicting in information. Nokia Global is in the process of acquiring certification in ISO 18001 and understanding the current organization structure for OHS is important to perform a gap analysis and formalizing program management which in turn will help in obtaining the certification for North America.

BAYLOR HEALTH CARE SYSTEM'S VULNERABLE PATIENT NETWORK: HOME-BASED CARE FOR VULNERABLE POPULATION ACHIEVES POSITIVE OUTCOMES FOR PATIENTS AND HEALTH CARE SYSTEMS

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Site Supervisor: Dr. Liz Trevino

The Baylor Health Care System Vulnerable Patient Network (VPN) is a unique program utilizing physicians, nurse practitioners, and community health workers to provide home-based primary care and social support services to medically and socially vulnerable patients discharged from Baylor University Medical Center, in Dallas, TX. This model of care is designed to improve health outcomes for patients and reduce unnecessary hospital utilization and costs. Impact analyses successfully demonstrated a reduction in ED-related utilization and costs when comparing one year pre- and post-enrollment in VPN. Further, individuals enrolled immediately following the index health event that lead to their referral to VPN were much less likely to revisit the hospital in the following year compared with those whose enrollment was delayed. Average cost per visit for those immediately enrolled was less than half of that of those with delayed enrollment suggesting the need for expeditious referral and enrollment to VPN.

INCIDENT COMMAND SYSTEM UTILIZATION OF FORT WORTH PUBLIC HEALTH

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Bioterrorism Health Emergency Preparedness (BHEP) Team
City of Fort Worth Public Health Department (CFWPHD)
Site Supervisor: Catherine Spranger, DrPH, Clinical Liason

The BHEP Team of CFWPHD is responsible for conducting staff training for mobilization of the Incident Command System (ICS) to respond to health-related incidents. The ICS is a standardized, on-scene, all-hazard incident management protocol based on a common framework designed to allow multiple types of agencies/jurisdictions to effectively work together to respond to an incident. A functional exercise was conducted at CFWPHD in August 2007 to measure the readiness of CFWPHD staff to mobilize the ICS and respond to a pandemic flu emergency. Exercise documentation was reviewed and an after action report was prepared containing background information, exercise summary, strengths, weaknesses, and recommendations. This information was presented to the management team. A refresher training presentation was then prepared to refresh the staff on basic ICS principles before they were engaged in further training. CFWPHD continues to train staff to be equipped and ready to effectively respond to an incident.

WRITING ISSUE BRIEFS

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The internship consisted of researching and writing two health policy issue briefs. The objective was to create jargon-free documents examining school-based mental health and long-term care as background information for participants at policy forums in Austin. The mental health forum was in November 2007 and the long-term care event is scheduled for May 2008. Research for each brief required reading more than 100 articles, reports and books. The mental health brief was rewritten and has been accepted for future publication in the peer-reviewed *Journal of Hospital Marketing and Public Relations*.

2008 COMMUNITY NEEDS ASSESSMENT: A SURVEY OF HEALTH SERVICES, CITY SERVICES AND SAFETY ISSUES

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Public Health Department, Fort Worth
Site Supervisor: Dr. Witold Migala, Ph.D, M.P.H

2008 Community Needs Assessment is a face to face survey with the residents within city of Fort Worth. It is planned by Epidemiology and Assessment division of Fort Worth. The first survey was conducted in 1998 and second survey was done in 2003. All residents are randomly selected following stratified random sampling protocols. The total implementation phase of study is projected to take 10-12 weeks. We are in between of the survey and doing the data collection phase. It is an assessment conducted at household level. The previous assessments have identified different health problems related to chronic conditions such as hypertension, diabetes mellitus are contributed by certain major risk factors. This study will benefit citizens by allowing health department to identify health needs, to allocate resources and to evaluate different programs and services provided to city of fort worth residents.

**DEVELOPMENT OF COST-TO-CHARGE RATIOS FOR THE
DALLAS-FORT WORTH HOSPITAL COUNCIL**

Andrea Lorden
Dallas-Fort Worth Hospital Council
Site Supervisor: Dr. Susan McBride

The member hospitals of the Dallas-Fort Worth Hospital Council (DFWHC) utilize the Data Initiative dataset of inpatient discharge records to review and compare their performance to the other area hospitals. In an effort to provide the member hospitals with useful information, it was determined that cost-to-charge ratios would be of value. After review of the literature, hospital cost reports from the Centers for Medicare and Medicaid Services (CMS) website were utilized to generate cost-to-charge ratios. For hospitals without CMS cost data, a step-up regression analysis is being preformed. The analysis includes the variables of hospital size, teaching status, ownership, rural verses urban, race mix, ethnicity mix, payer mix and case mix. The equation will be used to assign cost-to-charge ratios for hospitals with missing cost data. This method was developed using the total costs and total charges information, but will be further refined to create cost center specific cost-to-charge ratios.

**HEALTH PROMOTION PROGRAMMING: PLANNING, PREPARATION, AND
EXECUTION OF 30TH ANNIVERSARY OF THE COWTOWN MARATHON**

Brianna Nicole McGee
Cowtown Marathon Offices
Site Supervisor: Heidi Swartz, Executive Director

The Cowtown Marathon is a non-profit organization which promotes community health and wellness to North Texans of all fitness levels by providing enjoyable accredited races for young, old, skilled, and novice athletes. According to the Statewide Obesity Task Force, it is estimated that 35 percent of school-age children are overweight or obese. Furthermore, the American Journal of Public Health estimates that Texas fourth graders have a nearly 50 percent higher prevalence of overweight compared to children of the same age across the United States. 2008 marked the 30th anniversary of the Cowtown Marathon and the 5th anniversary of the Kids 5K race. Efforts during this practice experience were focused on grant writing for funding for the Kids 5K Health Promotion Program to aid in the prevention of childhood obesity, toward race day promotion and toward race execution.

DALLAS COUNTY HEALTH AND HUMAN SERVICES
HEPATITIS C AWARENESS PROJECT

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PURPOSE:

Dallas County Health and Human Services (DCHHS) recognized a need for increased public awareness and understanding of hepatitis C in the community. The goals of the program include informing individuals if they have been infected with hepatitis C, educating them on what the infection means to their health and letting them know how hepatitis C impacts their lives.

The purpose of this practice experience is to help design and present a DFW Hepatitis Education Seminar to be held on April 26, 2008. The objectives of the DFW Hepatitis Education Seminar are to: 1) Educate the community about hepatitis and 2) Inform the community about services available in the DFW area.

Additionally, the Dallas County Health and Human Services website will be updated to provide supplementary hepatitis C information and new web links to hepatitis information through the DCHHS website.

RHINOCONJUNCTIVITIS AND AIR POLLUTANTS IN
SYMPTOMATIC INDIVIDUALS

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Site Supervisors: Diana Jones, FNP RN CCRC, Bobby Q. Lanier, MD

The role of air pollutants in the onset of asthma and allergic rhinitis exacerbations has not been widely studied. Studies have indicated that children with active respiratory symptoms are more prone to respiratory problems in the presence of increased levels of pollution (PM2.5, NO2, SO2). To study this effect in adults an investigator initiated study is being conducted to determine how Rhinocconjunctivitis Quality of Life (RQoL) scores differ with regard to pollutant levels. 80 patients, aged 18 to 65, in 8 countries will be recruited to participate. RQoL scores will be ascertained by self-report, and pollution levels will be documented from the Texas Commission on Environmental Quality website. Results are not available at this time.

FITFUTURE: A COMMUNITY WORKING TOGETHER

Ewa Oberdorfer

FitFuture; University of North Texas Health Science Center

Site Supervisor: Ximena Urrutia-Rojas, DrPH

Purpose: The program aims to educate and motivate elementary children and families about achieving an appropriate weight, decrease obesity and making a commitment to a healthy lifestyle.

My Experience: I assisted in the intervention at Mitchell Boulevard Elementary School including physical activity and community marathons. I participated in meetings including the site supervisor and community partners. I presented a poster at Research Appreciation Day and helped to illustrate the year one data from the study.

Outcomes: Year two outcomes are unavailable. The year one results suggests that the intervention group had a smaller increase in BMI and percent body fat than the control group. Based on percentage change in BMI, the highest increase based on ethnicity and gender occurred in African-American controls and control males, respectively. Based on percentage change in percent body fat, the highest increase based on ethnicity and gender occurred in Hispanic controls and control males, respectively, with the intervention males decreasing in percent body fat.

CURRENT LEVELS OF PBDE FLAME RETARDANTS IN THE USA: HUMANS, FOOD AND ENVIRONMENTAL SAMPLES

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University of Texas School of Public Health, Dallas, Texas

Site Supervisor: Dr. Arnold Schechter, MD, MPH

PBDEs are found in all human blood and milk samples, and in animal foods. PBDEs in U.S. humans were much higher in 2003 than 30 years previously. Levels of dioxins, dibenzofurans, and PCBs were much lower 30 years previously. PBDE levels in the U.S. general population are the highest in the world. U.S. PBDE food levels are also high. Fetal Level of PBDEs are lower than adult human beings. Levels in the Vegans and Vegetarians are surprisingly low. Meat and fish are found to be the richest source for PBDEs and other POPs (persistent organic pollutant). Data collected by us suggest that cooking can lower the PBDEs level in the food. PBDEs are also found out on the vacuum dust and computers. Indoor air contains highest amount of PBDEs. Total PBDE estimated intake in U.S. exposed worker is 43 ng/kg/day. PBDEs Milk to Serum ratio: Range 1.0 to 2.6, Mean-1.4, and Median-1.4. Our study suggest that even today we are exposed to PBDEs every where.

COMMUNITY HEALTH & EDUCATION COORDINATOR

Amy Ruiz, B.S.
Harris Methodist Fort Worth Hospital
Site Supervisor: Paulette Golden, MS, RN

Harris Methodist Fort Worth's Education Department is responsible for new employee orientation, computer education, patient education, community health education, staff development, continuing nursing and medical education, as well as many other avenues. Duties as an intern included writing letters to various administrative individuals within the hospital, organizing the Annual Faith Community Nurses Retreat and other FCN activities, attending meetings at the hospital such as the Director's Stand Up meeting as well as outside meetings such as the Tarrant County Council on Family Violence and the HTCC Steering Committee meetings, helping to prepare for the Parish Nursing Basic Preparation course, and working on the 2007 Community Benefit Report. Furthermore, hands on work included assisting at the Albert Galvan Health Clinic and the Como Community Health Fair as well as helping with the community health hand washing program focused on young children.

REFUGEE SERVICES of TEXAS, INC: FRONTLINE SERVICES FOR REFUGEES ARRIVING IN FORT WORTH, TEXAS

Josephine Ryan
Refugee Services of Texas, Fort Worth
Site Supervisor: Sandy Myers

Over the last 30 years, RST has provided resettlement services to more than 8,000 refugees in Texas. As a partner in the U.S. Refugee Resettlement Program, which is based on a partnership of resettlement agencies, private businesses, and churches, RST employees, co-sponsors, and volunteers provide services to newly arrived refugees. Refugees are housed, provided cultural and community orientation, job referrals, language training, and access to social services and health care. Language barriers and cultural/technological differences create many challenges for clients adapting to life in Fort Worth, particularly in employment, transportation, and health care. Volunteers play a crucial role by providing newly arrived families with cultural orientation through friendship, English tutoring, transportation, and by mobilizing donations of household items, as refugees arrive with few personal belongings. Public health professionals are especially well-suited to serve as volunteers due to their training and worldview.

**THE CHALLENGES OF HEALTH CARE COVERAGE: A LOOK INTO THE
EFFECTS OF HOSPITALS, QUALITY OF CARE, ACCESS TO CARE AND HEART
DISEASE**

Tunu Tenende
American Heart Association
Site Supervisor: Jill Birnbaum

American Heart Association dedicated to building healthier lives free of cardiovascular disease (CVD) and stroke, in 1999 CVD contributed to a third of global deaths and still leads in causes of death. With heart disease having no specific liking to gender, geography or socioeconomic status the importance of health care coverage is very apparent; without it costs can be unbearable. After research into access to care, studies show that a policy such as EMTALA, which governs the guidelines for emergency room care, does not cause hindrance in providing quality care to heart disease patients. Also, regardless of challenges in decisions between financial stability and charity care or bad debt charges there has not been a proven correlation between a hospital's financial condition and charity cases or bad debt. Such information is important for those working in eradicating heart disease since it gives quality information when advocating for health care coverage.

**BREASTFEEDING ATTITUDES AND PRACTICE:
A SURVEY OF WIC PROGRAM CLIENTS IN TARRANT COUNTY**

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Site Supervisor: Micky Moss Moerbe, MPH, Biostatistician

Breastfeeding is an important public health concern. In Tarrant County, breastfeeding rates vary greatly. The purpose of this survey was to identify mothers' self-reported barriers to breastfeeding and their experience of breastfeeding promotion in local hospitals. Four WIC locations were selected within Tarrant County, one from each county quadrant. Mothers enrolled in the Tarrant County WIC program, over the age of 18, and had an infant aged 6 to 12 months were eligible for participation in the survey between January 1, 2008 and February 29, 2008. Results from this survey will be used to (1) identify barriers to breastfeeding, (2) improve current breastfeeding initiatives at existing WIC programs, and (3) identify hospital practices and policies surrounding breastfeeding initiation. This survey will provide an opportunity for Tarrant County Public Health to improve local maternal and child health through improved breastfeeding practices and increased use of baby-friendly hospital practices in Tarrant County.