

Department of Family Medicine and Public Health Sciences

# MPH Student Practicum Abstracts Spring/Summer 2016 Showcase August 30, 2016

## **MPH Student Practicum Experience- Spring/Summer 2016**

The Master in Public Health (MPH) Program at Wayne State University is pleased to present the Spring/Summer 2016 student practicum abstract book highlighting students' public health practice experiences.

We would like to express our gratitude and appreciation to all of the organizations, agencies and businesses that hosted and supported our students and provided them with practical public health experiences.

The MPH Program would like to congratulate the students for their hard work, accomplishments and contributions to the local public health community.

### **PUBLIC HEALTH PRACTICE CONCENTRATION**

#### Sana Khan

**SITE:** Southeast Michigan Area Health Education Center

**PROJECT TITLE:** *Human Papilloma Virus Immunization Practices in Southeast Michigan* **INTRODUCTION:** Research has linked certain cancers with strains of the very common human papilloma virus (HPV). HPV inoculation occurs most frequently in the early 20s, therefore the best time to vaccinate is prior to exposure, when the immune reaction has shown to be robust. Preliminary data suggest that areas with widespread vaccination, HPV prevalence has decreased significantly. Our project seeks to educate health providers on the importance of their role in increasing vaccine utilization.

**METHODS:** The CDC's "You are the key to HPV cancer prevention" webinars were delivered to health providers in southeast Michigan between 9/2015 -7/2016. Participant survey data was collected and analyzed. Initial information included profession of each participant, and the 16 subsequent questions used a five point Likert scale to provide information on whether the program increased their knowledge of: disease burden, the importance of vaccination and timing, counseling practices, and practice modifications.

**OUTCOMES:** At total of 53 responses were collected. Participants included physicians (3.8%), nurse practitioners (17%), physician assistants (3.8%), nurses (54.7%), nurse practitioner students (5.7%), other students (7.5%), and other providers (7.5%). Over 83% of participants either "agreed" or "strongly agreed" to statements that the webinar improved their knowledge and 80.8% stated they would change their practice based on the webinar. Our data suggest that these webinars improve provider knowledge and confidence. Thus, increasing and expanding the program is likely increase vaccine utilization.

#### **Teena Thomas Palathanam**

#### SITE: HFHS- Institute on Multicultural Health

**TITLE**: Disaster preparedness curriculum development project for the Faith Community Nursing and Health Ministries Network

**INTRODUCTION:** The main purpose of the project was to develop a disaster preparedness curriculum for the faith community nursing and health ministry program under the Henry Ford Health System. The curriculum would be used to develop unique comprehensive disaster plans for each congregation.

**METHODS:** A needs assessment survey was created and administered to the faith community nurses and health ministers in order to identify and determine the preparedness and disaster response training requirements. A literature review was conducted to identify existing disaster plans and protocols to guide the curriculum development. The training workshop was delivered to the faith community network participants which outlined the key aspects of the curriculum. The effectiveness of the training was evaluated with an evaluation survey.

**OUTCOMES:** The results of the needs assessment survey showed that none of the churches (N=11) were adequately equipped to face a disaster. Most of the churches did not have emergency communication plans (40%) or safety inquiry systems (18.1%) in place. None of the churches had an inventory of the disaster equipment that was regularly updated. A small percentage of churches (10%) had adequate pre disaster supplies. None of the participants had lock down drills or severe weather drills conducted in their churches. A majority of the respondents (50%) were most interested in training in emergency drills and exercises. All the salient points were integrated into the emergency preparedness curriculum. The Wayne County Department of Health, Veterans and Community Wellness is now interested in collaborating with faith based churches to function as a closed point of dispensing (POD) site for future public health emergencies.

#### Rasha Abdulridha

#### SITE: Michigan Urgent Care

**TITLE:** Using the Corporate Health Achievement Awards model to conduct a wellness survey to assess employee wellness and "presenteeism"

**INTRODUCTION:** The workforce represents a large percentage of the total population; therefore, workforce wellness has a large impact on public health. Work productivity is affected by two important concepts: absenteeism and presenteeism. Increased absenteeism has a direct effect on job productivity; however, job productivity would be affected more by decreased presenteeism. The most recent studies estimated the total cost of presenteeism in the USA to be greater than 150 billion annually. This is considered way more than disability and illness related costs. Creating a strong culture of health in the workplace would alleviate organizations' cost burden resulting from absenteeism and presenteeism. This study implemented the Corporate Health Achievement Award measures as established by the American College of Occupational and Environmental Medicine. The results of this study data analysis will serve as a basis for implementing a health promotion program to improve employees' wellness and presenteeism. **METHODS:** This study proposal assessed the wellness of employees through an online survey. The survey assesses measures of: physical health, mental health, nutritional health, and social interactions. Also, it assesses work hours, work challenges, and the potential opportunities for improvement. The study proposal has been submitted to the Institutional Review Board for approval.

**OUTCOMES:** The preliminary data analysis (N=16) calls attention to certain workforce health problems, behavioral trends and work challenges such as: overweight/obesity (67%), depression (25%), and perceived stress (87.5%) at least sometimes per week.

#### Christopher Giuliano, Pharm.D.

**SITE**: Ascension Health

**TITLE**: Evaluation of a clinical surveillance program (SENTRI 7) to optimize antibiotic utilization

**INTRODUCTION**: Ascension health is the largest catholic health system in the world. Recently, a clinical surveillance program was employed in an effort to optimize antibiotic utilization across the healthcare system. The program alerts pharmacists, who then use their clinical training to decide if antibiotics can be optimized. There had been no evaluation of the program yet; therefore, a formative evaluation of the program was planned.

**METHODS**: The first objective for the practicum was to identify factors that have led to successful antibiotic surveillance programs. The second objective for the practicum was to develop an evaluation plan for an antimicrobial surveillance program across a healthcare system. The third objective was to develop interview questions to be used as part of an evaluation.

**OUTCOMES**: A logic model of the program was developed that led to three main objectives of the evaluation. These objectives included identifying barriers to SENTRI7 use, evaluating how pharmacists use the program, and analyzing if clinical outcomes differed by level of SENTRI7 use. These objectives were evaluated by obtaining information through interviews, surveys, and historical records. Interview questions were developed using the Integrated Behavioral Model as a starting point. Questions were modified based on feedback received during pilot interviews with administrators and pharmacists. Random sampling from sites was used for conducting interviews as interviewing all sites was not feasible (>100 sites). Interviews were conducted and audio recorded. The next step is to transcribe and systematically analyze interviews and identify themes to direct program improvement.

#### Sajeda Ahmed

SITE: City of Detroit Health Department

**TITLE:** Supporting the Detroit Health Department in Implementing Affordable Care Act/Healthy MI Enrollment Strategies and Creating a Sustainable Home Visiting Model with the Maternal Infant Health Program (MIHP)

**INTRODUCTION**: In 2012, Detroit became the first major US city in history to convert its health department into a private institution amidst political discord and financial issues which prevented the health department from running efficiently. In 2014 public health services were transferred back to the Detroit Health Department under the direction of new health director. All efforts have since been focused on restructuring the health department and efficiently delivering essential public health services to over 700,000 Detroiters.

**METHODS**: Two projects currently underway include 1) analyzing and improving health insurance enrollment in the city, and; 2) studying former Maternal Infant Health (MIHP) programs and understanding how to re-implement a sustainable maternal home visiting program under the direction of the DHD.

**OUTCOMES:** Literature reviews of insurance statistics and former health department practices indicate several potential strategies that the Detroit Health Department could adopt to increase insurance enrollment and implement a sustainable and efficient maternal infant health program. Next steps for the DHD would be to assess currently available resources, identify potential partner organizations and create a plan of what changes should be implemented to increase insurance enrollment and provide comprehensive maternal health services in the future. An effective method of checks and balances will be needed to ensure accountability and to prevent health department resources from being misused or misallocated.

#### **Hashem Zokary**

**SITE:** Department of Physical Medicine and Rehabilitation Beaumont-Taylor (Oakwood) **TITLE:** *Using phones to help stroke patients with rehabilitation* 

**INTRODUCTION:** Stroke disability is a major public health concern especially with knowing that stroke is the leading cause of long-term disability. Post stroke aphasia is very stressful complication for stroke patients and their families. In the United States, it is estimated that approximately one million individuals suffer from aphasia. Few studies have examined telephone use as effective interventions in patients with expressive aphasia. This project might enhance the quality of life among stroke patients and provide a novel approach to aphasia treatment. My practicum is focused on getting the IRB approval for that project.

**METHODS:** Developed research questions along with a full literature review of the prior studies. Defined the inclusion and exclusion criteria. Assisted with writing the study protocol. Completed the IRB application and responded to the IRB questions and concerns. Developed the consent and assent forms according to the Beaumont Hospital guidelines. Prepared all supporting documents, such as Investigators Resume, Participants Eligibility Checklist, Site Signature/Designation of Authority Log, and the measurement tests which include the Western Aphasia Battery-Revised (WABR) and the Cognition and Communication Functional Independence Measure (FIM) scores. Participated actively in all research group meetings. **OUTCOMES:** Initial approval was received IRB-Beaumont in August. Using the Beaumont's new version (3/2016) of the Consent Form was requested. Consent form was updated and sent electronically. The final approval is expected to be in the 1<sup>st</sup> week of September.

#### **Elizabeth Bertran**

**SITE**: Wayne County Department of Health, Veterans, and Community Wellness (WCDH-VCW)

**TITLE**: *Identifying and addressing cultural barriers to diabetes self-management education provided by a county health department in a diverse population* 

**INTRODUCTION**: Diabetes self-management (DSM) requires modification of lifestyle and behaviors, which are inherently affected by culture. Many clinic patients with diabetes identify with Arab or Bengali cultures. Identifying and addressing the effect of these cultures on health-related behaviors is crucial to ensuring the adoption of lifestyle modifications and optimizing patient health outcomes. The purpose of this project is to identify and address cultural barriers to DSM education provided by the clinic to its diverse patient population.

**METHODS**: A literature review informed the development of a questionnaire designed to identify Arab and Bengali cultural factors affecting DSM. WCDH-VCW clinic patients completed. Results were summarized and recommendations for modification of clinic education were developed.

**OUTCOMES:** Barriers identified from the surveys were similar between patients of Arab and Bengali descent and included family responsibilities, lack of family understanding for a diabetes-specific diet, and lack of time to prepare healthy meals and/or exercise. Both patient groups agreed on several DSM facilitators, including religious activities, walking as exercise, physician consultation, and family encouragement/support. Bengali patients identified use of natural products, family participation in the patient's healthy lifestyle activities, and having a daily management routine as facilitators of DSM. Based on the results of this survey, patient education classes should include physician or medical student participation, family member participation, family-oriented class sessions, and discussion of natural products. Clinic case managers and psychologists can aid in the development of educational materials regarding the behavioral issues identified from this survey (self-care routine development, family relationships, etc.).

#### **Beth Olson**

SITE: The Macomb County Health Department

**TITLE:** A Community Health Assessment of Macomb County- A snapshot of a population **INTRODUCTION:** Assessment is an essential component of the three core functions of public health. The community health assessment (CHA) assesses the current health status of a particular community. Used for knowledge, policy planning, monitoring of health, diagnosis and investigation of a community, the assessment is an invaluable tool toward attaining a "snapshot" of the health of a particular community. It can further provide information on problems plaguing a community and identify assets that the community may already have. The local health department plays a pivotal role in completing a CHA. Members from the Macomb County Health Department (MCHD), together with leading community health officials from local hospitals, community organizations and schools have made it their goal to develop and publish the Macomb County CHA.

**METHODS:** Reviewed and analyzed published census data, CDC WONDER vital statistics, and Healthy People 2020 goals to create and present benchmark comparisons for examination by the steering committee. Community surveys were distributed and collected for analysis and results were communicated to community leaders.

**OUTCOMES:** The knowledge of how Macomb County measures up against benchmarks set by the state and Healthy People 2020 was acquired on selected priorities. Committee members discovered areas that needed improvement on obesity, percentage of current smokers, drug poisoning deaths, high blood pressure and stroke. An additional outcome showed that while community leaders feel transportation is a main priority throughout the community, survey results did not show that as a top 3 priority for community members.

#### **Baldish Oberoi**

TITLE: Assessment of physician lifestyle and social practices.

SITE: Wayne County Medical Society

**INTRODUCTION:** Wayne County Medical Society represents 3500 physicians who live and work in Wayne County, MI. Physicians are at higher risk of burnout than the general working population. According to a study by Shanefelt TD (2015) physicians suffering from at least one symptom of burnout has increased from 45.5% to 54.4% over a period of three years, 2011 to 2014. This study highlights that physician burnout is growing. The Physician Lifestyle Survey focuses on assessing excessive burnout among physician and health care providers who are the members of the WCMS.

**METHODS:** The target population of our survey includes health providers. Through the literature review process, we identified several factors underlying physician burnout. Factors include a lack of training to create a proper balance between work and life for physicians. Additionally, physicians are expected to lead but a lack of leadership skills can result in a dysfunctional leadership style. Increased workload also leads to physician burnout. The information from the literature review informed the design of the questionnaire. The study proposal was approved by the Institutional Review Board.

**OUTCOMES:** The implementation of the survey will illuminate the factors underlying physician burnout further. To assess physician burnout, physician members of the WCMS should be recruited to participate in the study. A proper strategy for the recruitment of the participant and the collection of the data has been devised.

#### **Osama Odeh**

SITE: Community Health Department, Beaumont Hospital

**TITLE:** Developing evaluation strategies and community organizing for the Community Health Department at Beaumont Hospital

**INTRODUCTION:** The Healthy Communities project is an initiative created by the Community Health Department at Beaumont Hospital in response to a needs assessment in 2013 required by the Affordable Care Act. The program works to address social determinants of health in the Dearborn area. The community health department works with community members in Dearborn in an effort to implement interventions that will have a positive effect on the health of the greater community. The program was in need of support specifically in evaluation, strategic planning, and in community mobilizing.

**METHODS:** Developed pre-evaluation strategies for each of the monthly community workgroups that related the project's objectives with possible evaluation techniques. In addition, worked with the workgroups in strategic planning including developing objectives, indicators, and outcome measures. Furthermore, marketed to and mobilized graduate students as well as high-school students.

**OUTCOMES:** The Healthy Dearborn project has had success in mobilizing community members and putting them to work in developing a proper strategic plan for the project. The results reflect a general need for baseline data on worksites, parks, food areas, the transportation system, and schools. They also reflect the benefit in recruiting graduate level students to the project as they can help greatly with research efforts. The workgroups had need of an evaluation protocol and likely did not have one because they are still in the initial phases of project development and lack the funding from the Hospital to hire an evaluator.

#### Syed Mohsin

**SITE:** Wayne State University School of Medicine, Department of Emergency Medicine, Section of Community Health, Detroit Receiving Hospital, Detroit

**TITLE:** *Linkage to Care Process for ED Patients with HIV and/or HCV Infections* 

**Introduction:** Human Immunodeficiency Virus(HIV) infection is a big health concern in the city of Detroit. The patients are often co-infected with HCV. "Special Projects" team is part of the Centers for Disease Control and Prevention's (CDC) Expanded Testing Initiative programs that operates in the Emergency Department(ED) at Detroit Receiving Hospital. They screen, educate and link the patients to care.

**Methods:** The program was supported by providing assistance in screening patients for HIV and HCV infections. Counselling was a strong part of patient interaction that enables us to educate patients about their disease, support them emotionally and encourage them to seek medical care. Furthermore, a tool was required to investigate the factors that prevented patients from attending their medical appointments and educate them to establish awareness within the patients regarding their disease. Moreover, an evidence based research on robust community health workers' network in emergency department setting was conducted in pursuance of creating self-sustainable model for linkage to care for chronic illness.

**Outcomes:** 127 and 36 patients were tested, counselled and educated for HIV and HCV respectively. Patients who required medical assistance were linked to care. Moreover, a report emphasizing on role of community health workers in the emergency department setting was generated. Lastly, a tool was created to assess reasons for no shows and patients' education conducive to decrease relapse in medical treatment of the patients.