

Master of Public Health Program

Perelman School of Medicine
University of Pennsylvania



Capstone Presentation Program

Fall 2020

Tuesday, December 15, 2020

To join, [click here](#)

10:00 am

Melissa James

Mentor: Joan Gluch, PhD, RDH, PHDP

Evaluating an oral health program at Penn Dental Medicine for Refugees

Abstract:

For the refugee population, oral health impacts not only systemic health, but also quality of life, psychosocial outcomes, self-confidence, and ability to gain employment. In an effort to improve oral health among refugees and survivors of torture, the University of Pennsylvania School of Dental Medicine opened their Survivors of Torture Clinic in 2019. The clinic offers comprehensive dental care and total oral rehabilitation to refugees free of charge. There has been no formal assessment of the oral health status of the SOT population in Philadelphia and the treatment provided at Penn Dental Medicine. Thus, we conducted a retrospective chart review to determine the oral health status of the population seeking care at the SOT clinic and to summarize the care rendered through the program in its pilot year. The study reviewed forty-nine charts, excluding patients under 18 years of age. The present study recorded caries and periodontal disease utilizing the Decayed, Missing and Filled Surfaces Index and the Community Periodontal Index of Treatment Needs. Treatment rendered was measured looking at the American Dental Association standardized treatment codes. Results of this study will provide valuable insight into the burden of disease in this vulnerable population and inform the continued evolution of the program beyond its pilot year.

Melissa James is currently a dual-degree Master of Public Health and Doctorate of Dental Medicine candidate at the University of Pennsylvania, graduating May of 2021. She received her BS in Integrative Neuroscience from Fordham University in 2017. Following graduation, Melissa plans to attend a general dentistry residency.

10:20 am

Olivia Duca

Mentors: Heather Klusaritz, PhD, MSW and Courtney Summers, MSW

**Fighting to foster a future of food secure families:
Addressing prenatal food insecurity in Philadelphia**

Abstract:

Despite the many efforts around the nation to alleviate food insecurity (FI), it remains a growing health concern in Philadelphia, effecting nearly 25% of the population. There exists a comprehensive amount of literature published on the impacts of FI programs; however, there is little known about how these programs operate to address prenatal FI within the larger clinical health system. To better understand the capacities in which clinical care settings can address prenatal FI, we developed a novel food service program called Locally Rooted- a free, eight-week produce delivery program developed to serve the Penn Family Medicine Clinic's prenatal patients. For future program evaluation, a qualitative interview guide was developed consisting of 33 interview questions centered on program implementation, barriers and facilitators, and program logistics. Future interviews will be conducted, and themes will be identified to further analyze and inform best practices to be shared with hospitals seeking guidance on prenatal FI screening and programming. As the first evaluation of Locally Rooted, results from this pilot program will be critical to improve future program development, while findings will help to inform future directions of research in this area to develop policy that focus on addressing social needs during clinical care engagements.

Olivia Duca earned her BS from James Madison University in 2017 with a concentration in Health Assessment and Promotion and Health Communication and has since held several positions in Public Health Research for the CHBR at the University of Pennsylvania. Her interests include chronic disease prevention and risk communication. Olivia is dedicated to working with patients to prevent and manage chronic disease through lifestyle and wellness, while embedding best practices of health communication to reduce risks and improve health outcomes.

10:40 am

Farzana Y. Khan

Mentors: Christine Forke, PhD, MSN, CRNP; Dominique Ruggieri, PhD; Rachel Myers, PhD, MS; and Peter Cronholm, MD, MSCE

Intimate partner violence services on college campuses: What's the student's take?

Abstract:

As a result of recent high-profile cases of sexual violence occurring on college campuses and the #Metoo movement, colleges have had to increase their focus on intimate partner violence (IPV); some have changed policies and invested in resources to address the issue. Unfortunately, prior work notes low utilization of services among college-aged IPV survivors. Therefore, it is important to understand students' perceptions of available offerings to know if these efforts are adequately addressing their needs. We propose a qualitative study to gather student input on existing IPV resources on Penn's campus – both traditional and virtual, which have become more commonplace during the pandemic. We will use focus groups to gather data on students' knowledge of existing IPV resources on campus, perceptions of the offerings, barriers to their use, and suggestions for improvement. We will recruit undergraduate and graduate students aged >18 years across the university; separate groups will be held for first year, second through fourth year, and graduate students due to the potential for varying needs and experiences between groups. We anticipate having 4-6 participants per virtual group and needing 4-6 groups per arm to achieve saturation of ideas. Groups will be led by trained moderator/co-moderator teams and content will be transcribed. A common codebook will be developed; transcripts will be independently coded by two student researchers to uncover key themes identified by students. Findings will be shared with college administrators and other key stakeholder groups on campus to better assist with enhancing resources to fulfill students' needs.

Farzana Y. Khan graduated from the University of Pennsylvania in 2019 with a bachelor's degree in Health and Societies, and will graduate from the University of Pennsylvania's Perelman School of Medicine in 2021 with a Master of Public Health degree. She is currently a Senior Research Assistant at the Penn Center for Mental Health where she is co-leading a research team on a mixed methods project. In the future, she plans on integrating her research interests which include health equity, mental health, sexual and reproductive health, and intimate partner violence with a clinical career.

11:00 am

Taylor Boggs, MSW

Mentors: Christine Forke, PhD, MSN, CRNP; Dominique Ruggieri, PhD; Rachel Myers, PhD, MS; and Peter Cronholm, MD, MSCE

Conducting focus groups in a virtual world: Best practices for IPV study recruitment

Abstract:

Intimate partner violence (IPV) is a major public health concern for college-aged students. Although schools have provided resources for IPV victims, previous research indicates that resources are underutilized. In 2008, a qualitative study using in-person focus groups was conducted on an urban campus in Philadelphia to explore the knowledge and perceptions of IPV on campus and the barriers to reporting and utilizing services (Wave 1). Since then, social movements like #MeToo and changes to campus policies (Title IX) have brought new light to the issue of IPV across U.S. college campuses. Considering these developments, we wanted to conduct a second qualitative study to explore current student perceptions on IPV, as well as the barriers and facilitators to utilizing campus resources (Wave 2). However, limited research offers best practices regarding how to meet the needs of college students experiencing IPV during times of remote-only campus engagement, as has been stimulated by COVID. Wave 2, therefore, uses online focus groups to better understand students' utilization of campus resources, both on and on-campus. We are currently in the process of recruiting approximately 36-48 undergraduate and graduate students for a total of 6-8 online focus groups. These sessions are being recorded and transcribed using Zoom software; transcripts are being double coded before conducting thematic analysis. Results from the online focus groups will inform recommendations for tailored campus resources to meet student needs. We will also review challenges and best practices of our online recruitment to inform future online focus groups with college-aged students.

Taylor Boggs, MSW earned her BS in Public Health from the University of South Florida and began her career in the field serving as a Community Health Promotor in Nicaragua for the United States' Peace Corps (2015-2017). She earned her Master of Social Work in 2019 from the University of Pennsylvania and will graduate with her MPH in December 2020. After graduation, Taylor plans on continuing her career in community and behavioral health in the areas of mental health, inclusive sexual & reproductive health, and intimate partner violence.

11:30 am

Alix Gustafson

Mentors: Evan Anderson, JD, PhD; Heather Klusaritz, PhD, MSW; and Justin Clapp, PhD, MPH

Assessing facilitators and barriers to implementing the Hi-Five housing first program in Philadelphia through provider and participant experiences

Abstract:

Research shows considerable challenges to promoting housing stability for a small subset of individuals who repeatedly cycle through correctional facilities, shelters, hospitals, psychiatric facilities, substance abuse treatment programs, and street homelessness. Housing First programs, which offer housing without preconditions such as sobriety or uninterrupted housing instability, have demonstrated considerable benefits in reducing chronic homelessness for individuals with cross-sector service needs. Philadelphia implemented a Housing First program in 2018 for individuals with a serious mental illness diagnosis who have persistent involvement with the criminal justice system and high utilization of homeless services. Our study evaluates fidelity to the intended intervention in addition to barriers and facilitators to effective implementation through analysis of semi-structured qualitative interviews with 6 clients enrolled in the program and 17 key informants, including stakeholders at the Philadelphia Department of Behavioral Health and affiliated case managers and housing services providers. Analysis is ongoing and the results of this qualitative study will help inform Philadelphia's Hi-Five program as it expands and provide guidance to other communities who aim to optimize the implementation of housing first initiatives.

Alix Gustafson has an extensive background in mental health and homelessness services working closely with individuals experiencing chronic homelessness, serious mental illness, substance misuse, domestic violence, and trauma. She will continue working with these populations through qualitative research to strategically bring their experiences to impact policy and program development.

11:50 am

Alexandra Pero

Mentors: Tamar Klaiman, PhD, MPH and Kristen Feemster, MD, MPH, MSHPR, FAAP

COVID-19: The successes and challenges of a local health department's response

Abstract:

SARS-CoV-2, the virus that causes the respiratory illness known as COVID-19, triggered an emergency response across US local health departments, something public health entities anticipate and prepare for, with the caveat that a novel infectious disease may differ by spectrum of disease, epidemiologic characteristics, case-fatality ratios, and high-risk populations. We have learned from past emergency response efforts to Ebola and H1N1 viruses that coordination, communication, organizational response, and response in chain of command at local health departments are critically important during a response. The Philadelphia Department of Public Health [PDPH] had to quickly prepare for and respond to COVID-19 once cases were identified in Philadelphia, with the additional challenge of ever-changing guidance and recommendations as more was learned about the disease. No study currently exists that examines the response of PDPH during a pandemic. Therefore, the present study conducted key informant interviews with PDPH personnel, assessing internal communication and surveillance activities at PDPH during the COVID-19 response in order to strengthen emergency response systems. The results have the potential to inform best practices, communication strategies, and policies at local health departments generally, and emergency planning at PDPH more specifically in the event of a future pandemic.

Alexandra Pero joined the Penn community as an MSW student in 2018 before transitioning to public health and pursuing an MPH on the global health track at the University of Pennsylvania in 2019. She has experience working in academia as a research assistant and in social services as a case manager, and currently works at PDPH in the Division of Disease Control focusing on the COVID-19 response as a COVID-19 Surveillance Outbreak Coordinator. Upon graduation, she intends to pursue a career in global health with a focus on infectious disease.

12:10 pm

Rani Plotkin

Mentors: Terrence Casey, BA; Shana Stites, PsyD, MA, MS; Jason Karlawish, MD

**“Together Make a Visit, Together Make a Plan”:
A dissemination and evaluation strategy for a Penn Memory Center messaging campaign**

Abstract:

In 2016, the Penn Memory Center (PMC) developed a series of advertisements designed to encourage Black and white urban-dwelling adult-children to attend medical appointments with their parent(s), however these messages have yet to be distributed. Building upon the work completed by PMC in 2016, this capstone presents a dissemination and evaluation strategy for these messages. Following extensive literature reviews, data analysis and stakeholder engagement, we propose specific techniques for repurposing and distributing the advertisements through an email campaign to the ENON Baptist Church community – a Philadelphia-based organization. Members of the ENON community will receive the messages within emails from the Church’s leadership, directing them to reach out to the Geriatric Division at the Hospital of the University of Pennsylvania (HUP) to schedule an appointment for their aging loved ones. We detail how we intend to measure the efficacy of the messaging campaign and include a survey template which would be delivered to the congregants at ENON following the successful dissemination of the campaign. Our primary aim is to provide guidance for the use and evaluation of these messages by the Geriatric Division at HUP to determine the efficacy of the call-to-action as part of a larger movement to change the conversation and attitude around involvement of adult-children in the care of their aging loved ones.

Rani Plotkin will graduate from the University of Pennsylvania in December 2020 with a Masters in Global Public Health. During her time at UPenn, she has enjoyed working on projects with the Penn Memory Center, The Galapagos Alliance and the Center for High Impact Philanthropy. Prior to pursuing her master’s degree, she worked in communications and marketing, following the completion of her bachelor’s degree in Anthropology and Spanish from Union College. Rani plans to pursue a career in health communications following her MPH graduation.

1:20 pm

Michael Galantino

Mentors: James Guevara, MD, MPH; Marilyn Schapira, MD, MPH; Frances Shofer, PhD

**Parental health literacy and child language development:
Exploring barriers for underserved Philadelphia families**

Abstract:

This project was aimed at determining whether parental health literacy is independently associated with child developmental status at 24 months and whether the language development of a child differs according to the level of parental health literacy. We conducted a secondary quantitative analysis, using data from the CHOP Study of Early Literacy Promotion, a population-based birth cohort from Philadelphia. Primary exposures were living in a home reading environment with a parent or guardian of not adequate or adequate health literacy levels, measured by the Short Assessment of Health Literacy. Outcomes were child language development scores, measured using the Stim-Q Read Subscale and Preschool Language Scales 5th Edition. 120 children were evaluated and separated into groups based on the health literacy scores of their parent or guardian to conduct a multivariate linear regression. Results will highlight the impact of parental health literacy on a child’s development early on in life and will provide crucial information for future investigators. The primary implications of these results will provide insight into the relationship between these two variables, further supporting supplemental studies.

Michael Galantino graduated from the Pennsylvania State University Bachelor program in 2015 and will be graduating from the University of Pennsylvania MPH program in 2020. He is currently a research coordinator with the Abramson Cancer Center at the Perelman School of Medicine. After graduation, Michael plans to continue his career in cancer research and plans to use his MPH degree to influence a better world for those around the Philadelphia community.

1:40 pm

Rachel Djaraher

Mentors: Kelli McIntyre, MS and Dominique Ruggieri, PhD

Blogging as a health communication strategy to increase knowledge and access of physical activity: A collaboration with the PDPH Philly Powered program

Abstract:

Sedentary behaviors are associated with a higher frequency of chronic diseases, such as cardiovascular disease, cancer, Type 2 Diabetes, and obesity. In the United States, 3 in 4 adults and 4 in 5 students do not meet the recommended daily levels for physical activity (PA). Inequality in obesity and its underlying factors, in particular PA and inactivity, contribute greatly to health disparities. In Philadelphia specifically, nearly 68% of adults are overweight or obese. Furthermore, 70% of youth in North Philadelphia, most of whom are Black or Hispanic, are overweight or obese. There is a need for public health initiatives that consider the racial and socioeconomic differences in accessing the necessary resources to promote PA. Targeted specifically at addressing physical activity, *Philly Powered* is a *Get Healthy Philly* initiative aimed at promoting and improving access to physical activity by providing free and low-cost exercise opportunities alongside a blog which contains information on health and wellness. In an effort to help address the need for increased knowledge and access of PA for all Philadelphians regardless of their socioeconomic status, this capstone project created content for *Philly Powered's* blog. The work was created over 3 phases: 1) understanding the mission for blog topic planning, 2) researching public health literature for blog content, and 3) curating tailored blog posts for *Philly Powered*. Implications of this work include continuing to synthesize relevant public health research into easily digestible blog posts and continuing to work on bridging the gap in PA-related health disparities among Philadelphia residents.

Rachel Djaraher graduated from West Chester University with a degree in Nutrition & Dietetics and will graduate from the University of Pennsylvania's MPH Program in May 2021. She currently works as a Senior Clinical Research Coordinator for physical activity clinical trials at Penn Medicine's Nudge Unit.

2:00 pm

MaryJane Fuhrer

Mentors: Dominique Ruggieri, PhD and Frances Shofer, PhD

**Experiences with nature and stress for the Penn community:
A needs assessment survey for the Nature Rx program**

Abstract:

Previous research has demonstrated an association between stress and college campuses, as well as that time in nature can be a stress reliever. Nature Rx is a program that was created in order to combat the negative effects of stress on college campuses. Already proven successful at Cornell University, the Nature Rx program was recently launched at the University of Pennsylvania. In order to better understand how to tailor the Nature Rx program for the University of Pennsylvania community, we constructed a community needs assessment survey focused on learning the following from the students, faculty, and staff: 1) how they rate their levels of stress; 2) their experiences with and perceptions of nature; 3) the kinds of outdoor activities that might interest them; 4) their preferred forms of communication to engage with the program; and 5) how COVID-19 physical isolation mandates have influenced participants' time spent in nature. The survey was sent out through email and responses were recorded over a two-week period. The results showed that respondents perceived nature's positive effects on mental health and that Nature Rx programs could help promote lower stress levels among this population. The results of this analysis can be used to inform the Nature Rx program and can serve as a baseline for future program assessments.

MaryJane Fuhrer is a Masters of Public Health student who is graduating in December of 2020. Her interests include health outcomes, health communication, and research and evaluation.

2:30 pm

Dianna Coleman, MA

Mentors: Hillary Nelson, PhD, MPH; Heather Klusaritz, PhD, MSW; and Dominique Ruggieri, PhD

**The birth of an anti-Black racist curriculum:
A qualitative step in the right direction for Penn's MPH program**

Abstract:

With disparity gaps across all disciplines and sectors being publicly exposed, showcased, and scrutinized, Penn's MPH program is currently taking inventory of latent racist undertones and oversights muted by "colorblindness" and "racial neutrality" approaches to curriculum development, teaching, research, and practice. This project took a deep dive into the literature, peer-reviewed and gray, and gained insights from "subject matter experts" within the context of anti-Black racist curriculum to improve the overall quality of education delivered in Penn's MPH program. Using Public Health Critical Race Praxis (PHCRP) fused with present-day "Abolitionist Education" as a framework to provide context and guide question formation, a qualitative lens and mixed-method approach provided a broad perspective and examined in-depth meanings from the point of view of the insider, while centering and elevating the voices of a marginalized community. The data was organized and summarized using thematic synthesis. Results revealed that there is greater self-reflection and intentionality needed to propel academia into a space that is racially conscious where learning becomes an equal and equitable exchange amongst all students, faculty, and staff. Insights from this research yielded concrete recommendations to guide anti-Black racist efforts within Penn's MPH program, while also presenting the challenges that will accompany this transition.

Dianna Coleman, MA graduated from Georgia Southern University in 2000, received an MA from the University of North Carolina at Charlotte in 2009, and will be graduating from the University of Pennsylvania MPH program in 2020. She is a self-proclaimed social justice advocate and abolitionist who is currently a part of the COVID-19 Containment Division at the Philadelphia Department of Public Health. Additionally Dianna works alongside various Philadelphia grassroots organizations whose mission is grounded in equity, justice, and liberation. After graduation, Dianna plans to continue her career in public health policy and programming.

2:50 pm

Arianna Unger

Mentors: Flaura K. Winston, MD, PhD and Dominique Ruggieri, PhD

**Understanding clinician strategies for assessing driving fitness:
An initiative to improve provider-patient discussions about safe driving at Penn
Medicine**

Abstract:

The World Health Organization (WHO) estimates that more than 1.3 million people die in road crashes each year, with an additional 2-5 million sustaining injuries or permanent disabilities. One frequently overlooked factor contributing to traffic accidents is driver medical predispositions, such as cognitive and physical impairments, which can compromise individuals' ability to drive safely. Medical clinicians may be in an ideal position to help mitigate the likelihood of accidents for affected persons by identifying patients with impairments that may impact driving ability and directing them toward appropriate driving rehabilitation services. However, prior studies have revealed that provider-patient discussions about driving occur relatively infrequently, and that when conversations do occur, provider recommendations about when patients can resume driving vary substantially. This research aims to better understand when and how providers initiate discussions about driving with patients, and the techniques that providers use to assess patients' driving ability. This study also aims to learn about the resources that providers would find useful for making decisions about referrals to driving rehabilitation programs and reporting high-risk drivers to the Pennsylvania Department of Transportation (PennDOT). Information obtained from this study may help inform safe driving screening tools and standardized driving rehabilitation program referral guidelines that can be incorporated into standard of care practices at Penn Medicine.

Arianna Unger graduated from Brandeis University with a bachelor's degree in Neuroscience and will be graduating from the University of Pennsylvania MPH program in December of 2020. She currently works as a clinical research coordinator in the Department of Neurosurgery at Penn Presbyterian Medical Center and is interning in the Mental Health Court Division of the Philadelphia District Attorney's Office for her MPH fieldwork.

3:10 pm

Talia Morikawa, PT, DPT

Mentor: Rachel Myers, PhD

Impact of peer mentorship on young adults of the BRAVE violence intervention program in Philadelphia: Interviews for quality improvement

Abstract:

Youth interpersonal violence is a serious public health issue in the US. Violence is a leading cause of death among adolescents and young adult males. BRAVE is a program component of the hospital-based Violence Intervention Program (VIP) at the Children's Hospital of Philadelphia. BRAVE is led by peer facilitators with support from program staff. The peer facilitators are former VIP clients recovering from their own adversity and received training to become BRAVE leaders and facilitators. While BRAVE and other violence intervention programs exist, there are few studies evaluating the effectiveness of such programs. Thus, we conducted qualitative interviews with BRAVE peer facilitators to capture their experiences and perceptions of the program and its impact on their lives. Domains explored included: reasons for becoming a peer facilitator; peer facilitators' interactions with Violence Prevention Specialists and other group participants; experience with and impact of sharing their story with others; transitioning from participant to facilitator; rewarding experiences and challenges; identifying skills developed; how being a peer facilitator played a role in their recovery; where they are today; what doors/opportunities came from this role; and how the program impacted their future aspirations. There were also program improvement questions regarding the peer facilitator training and BRAVE curriculum. This valuable insight will directly inform continued enhancement of the BRAVE program, including addressing training needs for these adolescents to build their capacity to lead, as well as contribute to generalizable knowledge on potential effective components of a hospital-based violence intervention program.

Talia Morikawa, PT, DPT will be graduating from the University of Pennsylvania MPH program in December 2020. She has practiced as a physical therapist for six years, is currently a Senior Project Manager at Penn Medicine Home Health, and is a Vice President of United Against Inequities in Disease (UAID). After graduation, Talia plans to pursue a career focused on addressing racism as a public health issue and aimed at improving racial equity and justice in Philadelphia.



Master of Public Health Program, 3620 Hamilton Walk, Anatomy Chemistry Building, Room 141, Philadelphia, PA 19104

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