

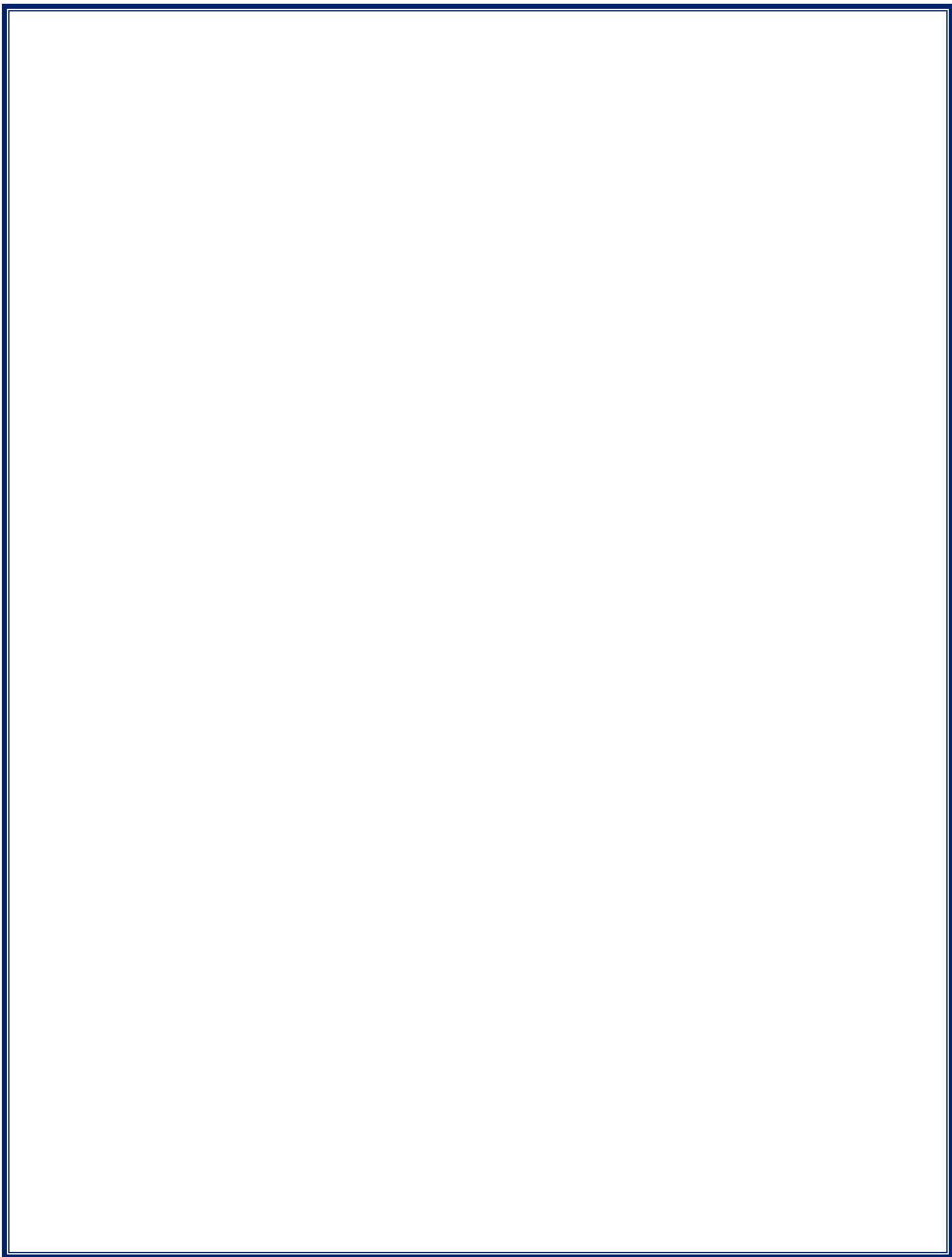
Master of Public Health Program

Perelman School of Medicine
University of Pennsylvania



Capstone Presentation Program

Spring 2021



Tuesday, May 4, 2021

To join via Zoom, click [here](#)

10:05 am

Caroline Chivily

Mentors: Whitney Guthrie, PhD and Kate E. Wallis, MD, MPH, FAAP

Item-level differences on the Modified Checklist for Autism in Toddlers with Follow-Up (M-CHAT/F) by race/ethnicity

Abstract:

About 1 in 54 children in the U.S. is identified with Autism Spectrum Disorder (ASD). The American Academy of Pediatrics recommends universal screening for ASD in primary care settings, yet despite recent improvements in the ASD prevalence gap between White, Black and Hispanic children, White children are still diagnosed earlier. A recent study at Children's Hospital of Philadelphia (CHOP) showed racial and ethnic differences in the likelihood that a child accurately screens positive for ASD and necessitated research examining the effects of race/ethnicity on individual items on the Modified Checklist for Autism in Toddlers with Follow-Up (M-CHAT/F). As such, the objectives of this study were to: (1) examine which individual M-CHAT/F items families of children from different racial/ethnic groups were more likely to endorse and (2) determine whether these items differentially predict ASD by race/ethnicity. Using retrospective data extracted from electronic health records, we identified several items that were differentially associated with later ASD diagnosis among families of Black, Non-Hispanic and Hispanic children, compared to White, Non-Hispanic children. Reverse-coded items (Items 11, 18, 20, 22) not only had differential endorsement rates across all racial/ethnic groups, but Items 18 and 22 were also two of four items which appeared to differentially predict ASD by race/ethnicity. Analysis is ongoing. The results of this study will identify potential areas of improvement for a widely used ASD screening tool, and make clear the need for real-world samples when assessing the validity and reliability of screening tools.

Caroline Chivily earned her Bachelor of Arts in Biology from Hamilton College in 2019. Caroline will be matriculating in medical school in the fall as a member of the Class of 2025 and plans to combine her MPH degree and medical training to work with pediatric populations.

10:25 am

Tim T. Wang

Mentors: Jill Johnson, PhD, MPH and Shivan Mehta, MD, MBA, MSHP

Association between regular dental care and colorectal cancer screening adherence in a nationally representative sample: An opportunity to promote preventative health behaviors?

Abstract:

Colorectal cancer (CRC) is the third leading cause of cancer-related deaths in the United States. Although earlier detection and treatment improves CRC prognosis, screening rates fall short of national recommendations. Dental visits offer potential as a novel route to engage patients for CRC screening outreach. Using the Behavioral Risk Factor Surveillance System, we analyzed the association between regular dental care and CRC screening adherence in a nationally representative population. Using a multivariate logistic regression model, adjusted for demographic and other relevant covariates, we examined whether regular dental care predicted CRC screening adherence. We also compared adherence rates to other preventative health activities among individuals with and without regular dental visits. Of the total study population (n=212,473), two-thirds were up-to-date with CRC screening. Over 75% of respondents with both dental and physical checkups were adherent, while 70% of respondents with neither were not. Individuals with regular dental visits were 63% more likely to be adherent with CRC screening, after adjusting for covariates. A greater proportion of respondents with dental visits were also up-to-date with flu vaccinations, mammography screenings, and cervical cancer screenings. To our knowledge, this is the first analysis of a nationally representative sample to identify the association between regular dental visits and CRC screening adherence. Our results suggest that there are elements of regular dental care associated with CRC screening adherence independent of socioeconomic and demographic factors, and physical checkup status. Dental visits can be explored as a potential avenue to promote CRC screening and other preventative health behaviors.

Tim T. Wang is a dual degree Master of Public Health and Doctor of Dental Medicine candidate at the University of Pennsylvania, graduating May 2021. He is also an Associate Fellow at the Penn Leonard Davis Institute of Health Economics and a Graduate Fellow at the Penn Perry World House. This fall, Tim will begin residency training in Oral and Maxillofacial Surgery at Massachusetts General Hospital, where he will also earn a MD from Harvard Medical School.

10:45 am

Jazmin Ricks

Mentor: Richard Pepino, MS, MSS

Sink or swim: Using a multifactor risk index to investigate vulnerabilities from leaded service lines in Philadelphia

Abstract:

Chronic exposure to low-levels of lead is still a public health issue, especially among minorities, children, and socio-economically disadvantaged groups. Epidemiological evidence suggests that even chronic low-levels of exposure to environmental lead causes deficits in cognitive development that are irreversible even after blood lead levels return to baseline. Lead that has leached into drinking water through leaded service lines (LSL) is a major source of exposure. To determine which neighborhoods in the city of Philadelphia are most vulnerable to LSL, we developed an LSL-Vulnerability Index (LSL-VI). Using 11 unique indices of Environmental and Health-Risk vulnerabilities, this index summarized important factors associated with the adverse health effects of lead exposure from LSL. ESRI's ArcGIS, a geospatial software, was used to classify risk of 134 neighborhoods ranging from possible values of "0" low to "10" high. This study found that all neighborhoods in Philadelphia had some risk of lead exposure from LSL. When considering all indices of Health and Environmental exposures, the NE Philadelphia Airport neighborhood had the lowest risk categorization of 2, and the McGuire neighborhood had the highest risk categorization of 10. Lead vulnerability is prevalent throughout Philadelphia with all neighborhoods having some risk to lead exposure. The LSL-VI will be disseminated in the form of a website that will share the results of these neighborhood risk scores, help the user better understand their own neighborhood vulnerability, and direct them to resources provided by Philadelphia Water Department to mitigate LSL vulnerabilities.

Jazmin Ricks graduated from Vanderbilt University's BA program in Medicine, Health, and Society (MHS) in 2016 and will graduate from the University of Pennsylvania's-Environmental Health program in 2021. She is currently a clinical research assistant at Center for Integrated Research in Nicotine Addiction under the Department of Psychiatry. After graduating, Jazmin plans to pursue a career in environmental health research and sustainability.

11:05 am

Chalanda Evans

Mentors: Raina Merchant, MD, MSHP, FAHA and Eugenia South, MD, MSHP

#BlackInTheIvory: An exploratory qualitative analysis of experiences of racism in academia through the lens of social media

Abstract:

Racial microaggressions are historically rife within academia. Black students and faculty are underrepresented in higher education (15% and 3% respectively) and racial microaggressions further amplify existing challenges that lead to poor mental health, decreased academic performance, lack of advancement opportunities, isolation and burnout. With the rise of social media, Twitter has been utilized to study racism, but research in this space largely focuses on those who share racist sentiments and not the day-to-day experiences of those subjected to racial microaggressions. Twitter provides a platform where users are likely to express with more candor than face-to-face interactions, highlighting experiences related to sensitive topics like racial microaggressions. Despite Twitter's popularity in public health research, racial microaggressions in academia have not been explored using social media data. This study sought to understand how Twitter is used to share experiences of racial microaggressions in settings of higher education. We conducted an exploratory qualitative analysis of publicly available tweets on Twitter to capture experiences of microaggressions in academic settings shared using the hashtag, #BlackInTheIvory. Unique tweets and quote retweets (n=1,103) were identified from a 1% sample from June 2020 to February 2021. Two members of the study team engaged in an iterative coding process and final codes were organized into thematic categories. Results from this study will provide insights into the personal experiences of racial minorities and the ways in which racial microaggressions occur in higher education. We hope insights gained will inform the development and implementation of intervention efforts to eliminate racism in academia.

Chalanda Evans will graduate with her Master of Public Health (MPH) degree from the University of Pennsylvania in summer 2021. She holds dual Bachelor of Science degrees in Biology and Psychology from Virginia Commonwealth University. Chalanda currently serves as a Senior Project Manager for the Penn Medicine Nudge Unit, and her research interests include health disparities, health behavior, and health psychology.

11:40 am

Meaghan McCabe

Mentors: Adi Hirshberg, MD and Rebecca Ashare, PhD

Pregnancy watch: Remote monitoring of pregnant and postpartum women with suspected or confirmed COVID-19

Abstract:

Pregnant patients diagnosed with COVID-19 are at an increased risk for severe illness and clinical follow up is warranted given the potential for worsening of disease. Our goal was to evaluate a remote symptom monitoring program for pregnant and postpartum patients with COVID-19 and describe the course of disease. We also evaluated differences in program utilization, patient adherence, and disease course during the early and later portion of the pandemic. Patients were enrolled in this 14-day program from 3/23/2020-12/31/2020. They received automated twice-daily text messages to assess their health status compared to the prior 12 hours. Patients who reported worsening dyspnea or texted “worse” at any time were automatically escalated to a Maternal Fetal Medicine provider. The provider evaluated the patient via telephone and triaged to continued outpatient surveillance or in-person evaluation. Demographics, clinical information, program engagement, and patient symptom course were abstracted from the electronic medical record and program platform. Of the 261 patients who enrolled (239 pregnant, 22 postpartum), 176 (67.4%) tested positive, 74 (28.4%) negative, and 11 (4.2%) never underwent recommended testing. Over the 14-day period, 207 (79.3%) patients responded to at least one check-in. One hundred sixty-six (80.2%) patients were managed remotely. Escalation of care occurred for 41 (19.8%) patients: 31 continued self-monitoring at home, 9 were directed to obstetrical triage, 1 did not follow-up with the provider. Of those directed to triage, 3 were admitted due to hypoxia. This program was effective in remotely monitoring pregnant women, reducing resources needed to track these patients.

Meaghan McCabe graduated from Loyola University Maryland in 2016 and will graduate from the University of Pennsylvania MPH program at the end of summer 2021. She is currently serving as Program Manager within the Maternal Fetal Medicine Research Program at Penn. After graduation, Meaghan plans to continue working at Penn and advancing her career in maternal health research and is excited for all the opportunities public health allows.

12:00 pm

Hanna Stambakio

Mentors: Rebecca Ashare, PhD and Sarah Willig, PhD

One health, many faces: Assessing diarrheal risk and protective factors in urban and rural Nepal

Abstract:

Nepal is an epicenter for emerging diseases due to unique cultural practices, the state of animal production, poor healthcare, and environmental triggers including climate change. Despite significant improvements in public health in the country over the years, diarrheal diseases still account for more than a thousand deaths a year in children under five years old. Previous research shows that the prevalence of stunting in children ages 24–59 months in Nepal is 42%, one of the highest in South Asia. Few studies have examined risk and protective factors behind diarrheal disease occurrence in the region, but data are limited for urban and rural areas of the country. One Health study design was implemented to assess potential contributors to diarrhea with fever in this population. The research team created a 36-item questionnaire that was administered in 24 urban and 26 rural households in 2013. The current project provides descriptive statistics of the immediate environment in urban and rural settings. Results show similar prevalence of diarrhea with fever over 6 months in both settings (70.8% urban vs 73.1% rural), but outcomes differ for the diarrhea with fever over the lifetime (41.7% urban vs 69.2% rural). The two study sites varied in people’s approach to drinking water source, water treatment, and protective personal equipment usage when interacting with cattle. Study results can inform tailored interventions to mitigate high prevalence of diarrheal diseases in Nepal. Future research is needed to assess a potential association between cultural practices and disease occurrence in Nepal.

Hanna Stambakio is a dual degree student of Master of Public Health program and Master of Environmental Studies at the University of Pennsylvania. Born in Russia and raised in Belarus, she attended International Sakharov Environmental University (ISEU) in Minsk, Belarus. While in ISEU, she studied a broad range of topics related to the interaction between humanity and environment with a focus on the environmental health. Her education was completed at Temple University in Philadelphia where she received a Bachelor of Science degree in Public Health in 2013.

12:20 pm

Do Hyung Kwon Jeong

Mentor: Joan I. Gluch, PhD, RDH, PHDHP

Did the COVID-19 pandemic affect dental health seeking behaviors? A comparison of new patient admissions, recalls, and emergency appointments at an academic clinical institution

Abstract:

The COVID-19 pandemic was a global public health emergency resulting in prolonged interruption of dental services, with government guidelines restricting treatment to urgent or telehealth appointments only. In Philadelphia, dental clinics and institutions were requested to limit treatment from March to June 2020, leaving patients to delay seeking care during that time and affecting the livelihood of countless dental practices. The effects of the pandemic on dentistry are still being studied, with anecdotal evidence pointing to an increase in emergency visits and patients of record hesitating to return for treatment. This study seeks to determine if there has been a change in frequency and demographics of recalls, new patient exams, and emergency visits at the University of Pennsylvania Dental School. The total number of D0150 (comprehensive oral evaluation), D0120 (periodic oral evaluation), and D0140 (limited oral evaluation) completed at the dental school's general and specialty clinics were examined in two time periods from before and after the suspension of services, with the pre-pandemic period spanning from June 1, 2019 to December 31, 2019 and the post-pandemic period from June 1, 2020 to December 31, 2020. The dental billing codes were used to represent the number of new patient evaluations, recalls, and emergency appointments respectively with quantities and demographic shifts in patients' age, gender, race/ethnicity, insurance, and zip code compared through statistical analysis. Results will inform future dental providers and administrators of ways to accommodate changes in health seeking behavior among patients after prolonged interruptions of dental services.

Do Hyung Kwon Jeong is currently a dual-degree Master of Public Health and Doctorate of Dental Medicine candidate at the University of Pennsylvania graduating in May of 2021. He received a B. Arch from the University of California, Berkeley in 2013. After graduation, Do will begin a general dentistry residency at the San Francisco Veteran's Affairs.

12:40 pm

Julia Hah, MSW

Mentors: Kate Wallis, MD, MPH and Sherry Morgan, PhD, MLS, RN

Can you hear us? Best practices for cross-language qualitative pediatric research: A systematic narrative review

Abstract:

Most qualitative research studies systematically exclude participants with Limited English Proficiency (LEP), by failing to address their specific language needs. One in four children has at least one LEP parent/caregiver, a growing population in the United States, whose experiences are unique and merit inclusion in qualitative research. Cross-language qualitative research studies, which use a translator or interpreter, can reduce linguistic inequities and systemic disparities in qualitative research participation, and in the knowledge that qualitative research can generate about an individual's lived experiences. This systematic narrative review aims to develop best practices for performing cross-language qualitative research that includes LEP parents/caregivers in pediatric settings. We performed a critical synthesis of existing guidelines including the Consolidated Criteria for Reporting Qualitative Studies (COREQ), Standards for Reporting Qualitative Research (SRQR), and prior recommendations about how translators and interpreters should be used [Squires, 2008]. We then conducted a systematic review that examined the research practices in 20 cross-language pediatric research studies from 2010 - 2020. Our findings demonstrate that few studies address cultural and linguistic barriers during each phase of the qualitative research process, including, who comprises the research team, development of interview guides, interpretation and translation for study participants, data analysis, and dissemination of findings. Using results of our review, we developed guidelines for conducting cross-language pediatric qualitative research through an iterative process with the consultation of qualitative experts. Our guidelines encourage cultural humility and include LEP parents/caregiver population in each phase of the research process.

Julia Hah, MSW, (she/hers) earned her bachelor's degree in Hispanic Linguistics and English at the University of North Carolina at Chapel Hill and will complete her dual degree master's in Social Work and master's in Public Health program in spring 2021 from the University of Pennsylvania. Julia currently serves as a research assistant on different qualitative studies related to gender-based violence and trauma, telehealth medicine, and autism spectrum disorder. Julia hopes to utilize her clinical social work skills while pursuing a public health career at the intersections of maternal child health and health equity.

1:40 pm

Felicity Mampe

Mentor: Andrew Steenhoff, MBBCh, DCH

The development of a survey to assess Botswana pediatric health care worker perspectives of visiting US pediatric residents in Gaborone, Botswana

Abstract:

The Botswana-UPenn Partnership (BUP) is a partnership between the Botswana Government, University of Botswana (UB), the University Pennsylvania (Penn) and its partner, the Children's Hospital of Philadelphia (CHOP). Since 2009, CHOP pediatric residents have done 4 week electives at Princess Marina Hospital (PMH) with UB's Department of Pediatrics and Adolescent Health. The CHOP residents undergo pre-departure orientation and training, as well as in-country orientation both with BUP and UB colleagues. Additionally, CHOP Global Health leaders meet with each resident for a post elective debrief. Leaders from UB and CHOP also meet every 6 months to review all aspects of the partnership including the visiting CHOP residents. Despite all these measures, perspectives of pediatric health care workers (HCW) at PMH regarding visiting CHOP residents have not yet been systematically assessed. The goal of this project is to assess the perspectives of pediatric HCW at PMH regarding visiting CHOP residents. These data will be used to further inform a mutually productive partnership between UB and CHOP. This study will use a survey design. These HCW will include pediatricians, pediatric residents, interns and pediatric nurses. We developed the questionnaire after an in-depth review of the literature related to learners in the global health setting. Survey questions were designed to address the following domains: learner professionalism, medical knowledge, and competency in systems-based care, procedural proficiency, and cross-cultural skills. An electronic questionnaire will be administered using Research Electronic Data Capture (RedCap) software. Results will be shared with both UB and CHOP leaders.

Felicity Mampe graduated from Hollins University with a Bachelor of Science in Chemistry and will graduate from the University of Pennsylvania MPH program in 2021. Felicity is currently a research specialist in the Division of Infectious Diseases at the Perelman School of Medicine. After graduation, Felicity plans to pursue a career in global health, addressing health disparities in Sub-Saharan Africa.

2:00 pm

Lyndsey McLain

Mentors: Anna Morgan, MD, MSc, MSHP and Nancy McGlaughlin, MSN

Process improvement of transitional care management for high-risk, primary care patients at an academic medical center

Abstract:

Transitional care management has been a focus of healthcare within the past 20 years as a means of improving patient care after being discharged from acute care settings. Transitional care management varies between healthcare settings, but many address the social, medical, and educational needs of patients. Studies have shown the positive impact of transitional care management interventions at various healthcare institutions. Our study seeks to standardize and increase the efficiency and usefulness of the transitional care process at Penn Medicine to improve the care provided to patients. We conducted process improvement strategies (Lean Six Sigma) and a qualitative focus group with the care managers who conduct the transitional care management calls. We mapped the current transitional care management process, identified variations in the process, and implemented adjustments that could improve the process and the care provided to patients. Typed transitional care notes and effective redirecting of the conversation resulted in shorter process times while the converse actions were determined as non-value added actions. Based on our findings, we suggested potential alterations to the process including typing call notes, training on effective redirection, handling awkward situations, and updating documentation standards. Transitional care management addresses multiple aspects of patients' health and our study seeks to identify and address parts of the process that are not beneficial to the patient or care manager in order to make the process more efficient and effective for all parties involved.

Lyndsey McLain graduated from the University of North Carolina at Chapel Hill with a BA in Economics, a BS in Biology, and a minor in chemistry. They are now a Master of Public Health candidate with interests in healthcare administration, digital health, and health equity. Upon graduation in May 2021, Lyndsey will begin working at Stanford Health Care.

2:20 pm

Georgia Reilly

Mentor: Danielle Cullen, MD, MPH, MSHP

**Clinically-based free meal program during COVID-19:
A hybrid Type I effectiveness and implementation Study**

Abstract:

The USDA Summer Food Service Program (SFSP) was extended to provide free meals to children during remote learning during COVID-19, but fewer than 1 in 8 eligible children participate. The medical center is one of the few institutions that families access during the pandemic and may be a point-of-entry for these programs. We evaluated the effectiveness of situating a SFSP in the medical setting in terms of 1) intended and repeated use of the SFSP, and 2) subsequent reported family-level food access, while gathering information on implementation. We partnered with a community agency to provide free breakfast and lunch to all children ages 2-18 and their siblings during clinical visits in the emergency department and 4 outpatient centers associated with an urban children's hospital. Families were offered boxed meals and information regarding how to access SFSP sites. Between June-August 2020, parents completed a survey at time of participation and 30 days after regarding intended and actual repeat use of the SFSP and perceptions regarding food access. We also measured implementation acceptability, feasibility, and reach. Since March 18th, 2020, our program distributed 43,015 meals across the 5 clinical sites, and reached 344 families per day at its peak. Of the 449 caregivers (median of 1 child/family, IQR 1-4; 41% reported food insecurity) who participated, 23% reported previous knowledge of the SFSP. The majority (82%) planned to use the SFSP again, either at the hospital or in the community, 53% used the program again during the subsequent 30 days, and 43% participated at least weekly. Repeat program use was significantly associated with improvement in food access over the follow up period ($p < 0.001$). Families and clinical staff rated the program as highly acceptable, while remaining feasible and adhering to COVID-19 regulations in all 5 settings with minimal impact on clinical flow. This study demonstrates that situating a SFSP in the medical setting increases awareness of and subsequent engagement with community resources among families. It provides evidence to support the potential of co-locating direct service programs along with referrals in the clinical setting to positively impact family level food access, even during a pandemic.

Georgia Reilly is a Master of Public Health student and research assistant at Children's Hospital of Philadelphia.

2:40 pm

Elizabeth Duthinh

Mentor: Oana Tomescu, MD, PhD

**Beyond pass/fail:
Medical student wellness and eliminating shelf exam score cutoffs for clerkship honors**

Abstract:

Medical students have a disproportionate rate of depression and anxiety symptoms relative to the general population. As part of a school-wide initiative at University of Pennsylvania Perelman School of Medicine to address this disparity, standardized National Board of Medical Examiners subject exam score cutoffs required to qualify for a clinical rotation grade of honors were eliminated, beginning with the entering class of 2016. This study evaluated the impact of this change in grading on medical student wellness as measured by validated scales for burnout, quality of life, and perceived stress. The class prior to the institution of the changes served as a control group. Data were collected during mandatory class periods at the school of medicine via anonymous paper surveys at the beginning and end of clinical year. Two-way analyses of variance were performed on the aggregate data. While this evaluation did not capture an improvement in student wellbeing after the elimination of score cutoffs, the results suggest that the next round of medical school curricular reform may require deeper changes to the clinical curriculum, including a focus on student experiences in the hospital.

Elizabeth Duthinh earned her BA in public policy at Brown University and is currently an MD/MPH dual-degree student at the Perelman School of Medicine at the University of Pennsylvania. She will start her residency in psychiatry this summer.

Wednesday, May 5, 2021

To join via Zoom, click [here](#)

10:05 am

Neha Chohan

Mentor: Ashlee Murray, MD, MPH

Caregiver acceptability of a novel social needs program in a pediatric emergency department during the COVID-19 pandemic

Abstract:

The COVID-19 pandemic has heightened social needs for many families, especially those experiencing loss of income, health insurance, and difficulty accessing food and housing. The Children's Hospital of Philadelphia (CHOP) Division of Emergency Medicine and Social Work recognized this need in April 2020 and created the Family Connects program. This program consists of social work interns and medical students, who call families in the CHOP ED and connect them with community social services. The study objective was to understand experiences of families who engage with and receive resources through Family Connects, and to improve the program's delivery and intended outcomes. We conducted a descriptive study utilizing qualitative semi-structured interviews with a purposive convenience sample of adult participants that visited the CHOP ED from December 2020 through February 2021 and were contacted by Family Connects. Participants were recruited via phone call 2-4 weeks after their ED visit and invited to participate in a 10-minute interview. Participants were asked questions to understand perspectives about program logistics, the telephone interaction, and resources provided. Interviews were recorded, transcribed, and de-identified. A codebook was finalized after three reviews, transcripts were coded by two independent coders and analyzed for themes. Twenty-eight interviews were completed with 18 families who received a resource and 10 who did not. Participants had an overall positive experience with the program, preferred a text-alert prior to receiving the phone call, and recommended post-ED follow-up. These results will inform improvements for program delivery and its effectiveness in connecting families to community resources.

Neha Chohan graduated from the University of Washington in 2018 and will graduate from the University of Pennsylvania MPH program in 2021 with a concentration in Global Health. She is currently a research specialist at the Perelman School of Medicine working in a virology lab focusing on HIV vaccine development.

10:25 am

Sierra Alexandria Cribb, MSW

Mentors: Heather Klusaritz, PhD, MSW; Shimrit Keddem, PhD, MPH; and David Rawal, MPA, MA

**Predictors of non-routine treatment termination:
A retrospective analysis of discharges from an inpatient drug treatment facility**

Abstract:

In 2017, the U.S. Department of Health and Human Services (HHS) declared that the opioid epidemic had evolved into a public health crisis and released a 5-Point Strategy for combatting its effects. Among their priorities has been to improve access to services for treatment and recovery. Despite efforts to expand treatment options, the number of people that report illicit drug use, experience opioid-related overdoses, and/or experience fatal overdoses continue to rise rapidly. This is particularly true in urban drug markets and metro areas. Additionally, the epidemic has created a major burden for the nation's economy and healthcare system alike. While access to treatment has progressively improved, providers within recovery services continue to experience a barrier that has been critical to treatment efficacy: early treatment disengagement. We used discharge records from an inpatient behavioral healthcare facility in Philadelphia, PA to assess the relationship between client characteristics and discharge outcomes. Using descriptive statistics, chi-square, ANOVA, and multiple logistic regression analyses we were able to explore trends among non-routine discharges. Results will inform future treatment options and help identify potential predictors of early treatment termination.

Sierra Alexandria Cribb, MSW graduated from Georgetown University in 2018 and the University of Pennsylvania's Master of Social Work Program in 2020. She will graduate from the University of Pennsylvania's MPH program in 2021. She currently works as a Mental Health Therapist for The Wedge and hopes to continue doing so, as well as begin exploring creative therapeutic interventions, after graduation.

10:45 am

Ami Deshpande, MSW, LSW

Mentors: Marian Reiff, PhD, MSc and Jill Johnson, PhD, MPH

The impact of a Mindfulness-Based Stress Reduction program on university students' mental health

Abstract:

Stress and poor mental health are critical public health issues amongst university students. The prevalence of mental health concerns has increased over the past several decades and has been further exacerbated by the COVID-19 pandemic. Researchers have found various types and timespans of mindfulness-based interventions to positively influence university students' mental health. The objective of this study was to evaluate the impact of an eight-week Mindfulness-Based Stress Reduction (MBSR) group program on students' mental health across three time points as a form of primary prevention. University students voluntarily participated in an eight-week MBSR program offered from 2016 to 2020. Scales for mindfulness, satisfaction with life, psychological distress, and perceived stress were measured at pre-, mid-, and post-time points and compared using repeated measures ANOVA and a Bonferroni post hoc analysis. Ninety program participants completed all three surveys; they were predominantly graduate students (82%), White (57%), and female-identifying (69%). Participants showed statistically significant improvements in all outcome measures across the eight-week program, as well as between pre- to mid- [$p < 0.05$] and mid- to post-surveys [$p < 0.05$], except for the Satisfaction with Life Scale pre- to mid-survey outcomes [$p = 0.065$]. In addition, 100% of participants reported they would recommend this program to their peers. An eight-week MBSR program can be an effective intervention for improving mental health and well-being among university students. This study supports the use of MBSR as a public health, group-based approach to supporting students and their mental health needs.

Ami Deshpande, MSW, LSW earned her BS in Interdisciplinary Health Sciences from the University of Illinois Urbana-Champaign in 2018. She graduated with her Master of Social Work in 2020 from the University of Pennsylvania and will graduate with her MPH in May 2021. She is a recently licensed social worker and is currently a research assistant at the Center for Injury Research and Prevention at CHOP with the Violence Intervention Program. After graduation, Ami plans on pursuing a career in integrated behavioral health.

11:20 pm

Tahira Islam

Mentor: Rebecca Ashare, PhD

Medical cannabis use and symptom burden among patients with serious medical conditions

Abstract:

For years, patients with serious medical conditions have used and praised medical cannabis for its benefits in symptom relief. Pennsylvania Governor Tom Wolf legalized medical cannabis in Pennsylvania in 2016, and in 2018 under the Medical Marijuana Program, it became available for patients at dispensaries. Although 36 states and the District of Columbia have currently legalized cannabis for medical use, it is still classified as a controlled substance under federal law, making research to develop evidence-based guidelines difficult. Moreover, little research has been done regarding the impact of medical cannabis on symptom burden and the subsequent impact on quality of life. This project aimed to examine the experiences of patients who are suffering from serious medical conditions as defined in the Pennsylvania medical cannabis law and who utilize the medical cannabis program. Using baseline data from an observational, longitudinal study conducted in Pennsylvania, descriptive analyses were performed to characterize the certifying medical conditions (e.g. anxiety, chronic pain), patients' symptoms (e.g. anxiety/panic, pain, nausea/vomiting, sleep disturbance), and concomitant medications (e.g. opioids, benzodiazepines, and anxiolytics). In addition, this study evaluated changes in perceived symptom severity while using cannabis. These baseline data are part of a 6-month longitudinal study that will inform dosages and forms that work best for particular symptoms, how well products are tolerated, and potential side effects of medical cannabis. Ultimately, these data will provide critical information to guide policy and develop evidence-based guidelines to benefit both patients and clinicians.

Tahira Islam graduated from the University of Pennsylvania in 2020 with a major in Health and Societies and minors in Nutrition, Neuroscience, and Health Care Management and will graduate from the MPH program in 2021. She is currently a clinical research assistant with Penn Medicine's GI Cancer Risk Evaluation Program. After graduation, Tahira plans to pursue a career in health care administration, health policy, and health communication.

11:40 am

Induja Maheswaran

Mentors: Joan I. Gluch, PhD, RDH, PHDHP and Maria Velasco, DMD, MS

Effects of the medical home on oral health for children with autism spectrum disorder

Abstract:

Autism spectrum disorder (ASD) is seen in roughly 1.5 million children in the United States, and the prevalence has been rising over time. The condition has been linked to poor oral health, however the effect of autism severity on dental access and oral health outcomes has not been elucidated. The primary aim of this study was to test the hypothesis that dental access and oral health worsen as autism severity increases. Furthermore, the secondary aim looks at the medical management of autism and care coordination as a positive effect to dental access to care and improved oral health. This was a retrospective study using the 2017-2018 National Survey of Children's Health (NSCH). A total of 44,952 children were included in the study cohort. Regression analysis demonstrated that the odds of a preventive visit decreases significantly as autism severity increases (73% and 39% of normal for moderate and severe autism, respectively). Moderately and severely autistic children who take medications were not found to have lower odds of a preventive visit, as was the case with moderately autistic children receiving behavioral therapy. There was no association between autism severity and preventive visits when children have a medical home, and mild/moderate ASD children were not less likely to have a preventive dental visit when care was well-coordinated. As ASD severity increases, access to dental care decreases. Treatment for behavior through medications and behavioral therapy can have an impact, but medical homes and care coordination are even more powerful at blunting this trend.

Induja Maheswaran is currently a dual-degree Master of Public Health and Doctorate of Dental Medicine candidate at the University of Pennsylvania, graduating in May 2021. She received her BS in Bioengineering and Statistics from the University of Maryland, College Park. After graduation, Induja will begin a residency in pediatric dentistry at the University of Penn/Children's Hospital of Philadelphia.

12:00 pm

Angela Song

Mentor: Courtney Benjamin Wolk, PhD

Factors affecting the implementation of a community health worker-based asthma program in Philadelphia public schools

Abstract:

Childhood asthma affects more than 1 in 4 school-aged children in West Philadelphia, and children with asthma miss three times more school days than those without asthma, with the highest proportion of school days missed in low-income communities. The West Philadelphia Controls Asthma (WPCA) program is a community-based intervention that involves community health workers collaborating with school nurses to ensure that children with asthma receive their daily asthma controller medication. In order to study the effectiveness of implementation and sustainability of this intervention in schools, we conducted semi-structured interviews with 7 school nurses and 4 CHWs, exploring the barriers they encountered around program implementation. Results were analyzed using qualitative data software and coded for clarity. Consistent with constructs from the Consolidated Framework for Implementation Research, themes emerged that reflected barriers related to the inner setting, including challenges incorporating the program into nursing workflow and existing asthma exacerbators in the school environment, and the outer setting, including difficulties accessing primary care providers by family members, and challenges communicating with family members. These results will inform program implementation and sustainability of WPCA in the coming years.

Angela Song is pursuing a Master in Public Health and a Doctorate of Medicine. She graduated from Columbia University in 2011 with a BA in Biology. Upon graduating from Penn this spring, Angela is excited to be headed to Kaiser Permanente San Jose to start a residency in Psychiatry. She hopes to balance her clinical practice with her passion for public health approaches to mental health equity.

1:20 pm

Nicholas Sachs

Mentor: John H. Holmes, PhD, FACE, FACMI

Analysis and policy proposals to reduce fatal car crashes in Pennsylvania

Abstract:

Each year in the United States, thousands of Americans die in motor vehicle crashes, incurring monumental human and economic costs on society. Numerous studies have examined factors associated with risk of fatal motor vehicle accidents. While previous research has looked at nationwide traffic statistics and compared crash rates between states, there is a dearth of literature on crashes within states. To examine correlates of fatal crashes, we used the Fatality Analysis Reporting System (FARS) data, a publicly available database from the National Highway Traffic Safety Administration (NHTSA). To address variation in data definitions and elements from year to year, we created a single FARS data resource through recoding, harmonization, and integration of 42 years of the Accident, Person, and Vehicle data files that comprise FARS. We then used this dataset to examine factors related to fatal crash frequency across counties in Pennsylvania, weighting county data by their average daily vehicle miles traveled. Using a multivariate negative binomial regression model (LR(18) 372.83, $p < 0.0001$), we found that the frequency of fatal car crashes was associated with a larger number of fatalities per crash (IRR=1.03, $p < 0.001$), the summer months (IRR=1.02, $p = 0.004$), vehicle rollover (IRR=1.05, $p = 0.001$), issues with roadway markings (IRR=1.07, $p = 0.002$), and the crash occurring on a US highway (IRR=1.46, $p = 0.008$). In contrast, factors associated with a decreased rate of fatal car crashes were crashes occurring on a National Highway System roadway (IRR=0.92, $p < 0.001$), at night on a lighted roadway (IRR=0.97, $p = 0.001$), and in the vicinity of a work zone (IRR=0.93, $p = 0.001$). This dataset and the results presented here can be used to determine ways of developing policies to reduce future road fatalities.

Nicholas Sachs is a 5th year MD/MPH student at PSOM and will begin his Emergency Medicine Residency at Penn in June. He earned a Bachelor of Arts degree in Biochemistry from New York University in 2016. His interests lie in clinical emergency medicine, injury prevention, and public health policy.

1:40 pm

Nahara Saballos

Mentors: Sherry Morgan, PhD, MLS, RN and Ryan M. Close, MD, MPH

The effects of iron supplementation on the pediatric microbiome: A systematic review

Abstract:

Dietary iron deficiency was the seventh leading cause of global disability-adjusted life years among children ages 0-9 years in 2019. As one potential solution to this problem, the World Health Organization (WHO) recommends iron supplementation for all children living in settings where anemia prevalence is 40 percent or higher. However, despite iron supplementation being a cost-effective treatment, several studies have raised concerns regarding the safety of untargeted iron supplementation since it can be associated with increased incidence of diarrhea, dysentery, systemic inflammation, and malaria. In 2007, the WHO retracted their recommendation for malaria-endemic areas, essentially calling for the deimplementation of this intervention. The objective of this systematic review was to review studies that assessed the effects of iron interventions on the pediatric microbiome, which could be contributing to an increased incidence of gastrointestinal illness and risk of morbidity. Five studies met the inclusion criteria for this review and were evaluated for microbiome and bacterial analyses, systemic inflammatory markers, and efficacy of iron intervention. Results revealed a significant increase in bacterial dissimilarity among study participants who received iron interventions in three of five studies, and noted higher abundances of enteropathogenic bacteria from the genus *Clostridium* and *Escherichia/Shigella* when compared to control groups. These findings support the WHO's recommendation that untargeted iron interventions, particularly in settings where children are more exposed to enteropathogens and are at an increased risk of morbidity and mortality from infectious diseases, should be deimplemented.

Nahara Saballos graduated from Haverford College with a BA in Anthropology and spent a year working alongside community health workers in Nicaragua prior to medical school. She is currently a dual-degree MD/MPH student at the University of Pennsylvania and will stay at Penn as a Family Medicine resident physician after graduation. Nahara hopes to continue fostering ties between primary care, global health, and public health to build more equitable clinical practices in Philadelphia and beyond.

2:00 pm

Pegah Maleki, MSW, LSW

Mentors: Sherry Morgan, PhD, MLS, RN and Iliana Garcia, MPH

The impact of community-based food insecurity programming on immigrant populations: A systematic review

Abstract:

Food insecurity in the United States is a public health crisis with substantial disparities, disproportionately affecting individuals from racial and ethnic minority backgrounds. For immigrant families, limited financial resources, language barriers, and preferences for culturally appropriate food can exacerbate household food insecurity, while complex processes to access food supply programs can lessen access to available resources. Providing community-based resources as a supplement to federally funded services may lessen barriers and expand social connection for immigrants, strengthening food security. This systematic review aimed to 1) Assess the impact of community-based food insecurity programming on health, food insecurity, and social outcomes among immigrant populations; and 2) Examine food programs facilitators and barriers. A literature search within five databases and two literature reviews (title/abstract and full text) yielded 18 studies. Two reviewers appraised study quality, while one reviewer extracted data including outcome measures, facilitators and barriers, and factors concordant with modified Consolidated Framework of Implementation Research (CFIR) constructs on intervention and participant characteristics. Based on extracted data, community-based food insecurity programming has an overall positive impact, increasing community food security through enabling food and skill sharing across participants with neighbors and friends; and increasing social cohesion and feelings of belonging, supporting participants' resettlement and connection to new environments. Funding should be allocated to support community-based food insecurity initiatives to not only provide immigrant communities with resources for self-powered interventions for personal and communal food production and acquisition but to present opportunities to build collective social capital, enabling long-term population-level food security.

Pegah Maleki is a licensed social worker and current graduate student in Penn's Master of Public Health Program. She currently works within multiple roles: as a research assistant at Policy Lab at the Children's Hospital of Philadelphia (CHOP) supporting research on adolescent sexual and reproductive health; as a resource navigator for patients screened as food-insecure through CHOP Karabots' food pharmacy; as a member of the research and grants committee for a maternal health disparities lab operated out of Tufts University; and as a graduate assistant supporting operations for Penn Center for Health Equity Advancement's (CHEA's) Social Needs Response Team.

2:20 pm

Aisha A. Chughtai

Mentors: Frances K. Barg, PhD, MD and Katherine Yun, MD, MHS

Understanding attitudes around the COVID-19 vaccine in the Pakistani-American community

Abstract:

With the on-going COVID-19 crisis, priorities have shifted from containment to focus on widespread vaccination efforts. To ensure that we reach herd immunity, there is an urgent need to understand varying attitudes and experiences around vaccine culture, acceptance, and hesitancy, particularly among historically underserved communities. Using ethnographic and qualitative research methods, this project aimed to understand barriers and attitudes related to COVID-19 vaccine acceptance in the Greater Philadelphia Pakistani-American community, focusing specifically on vaccine confidence, complacency, uptake, and access to capture attitudes around vaccine acceptance and hesitancy in this community. Further, this study comparatively examined how socio-cultural, political, religious, and/or personal motivations and relationships impact vaccine uptake and attitudes in this community. Drawing from interviews and open-ended questionnaires with 12 members of this community, the results indicate that personal ideologies, lack of access to technology, lack of health literacy and education, and a general lack of adequate information about the COVID-19 vaccine are leading to vaccine hesitancy and complacency in this community. Additionally, respondents expressed a general mistrust and high perceived risks associated with the vaccine, suggesting the need for an improved approach to health literacy and information access. This study may help guide the development of informational approaches to reduce vaccine hesitancy for underserved migrant populations, ideally leading to an improved vaccine acceptance rate in migrant populations across the Philadelphia Area and beyond.

Aisha Chughtai is currently a third-year dual degree PhD/MPH student. Her dissertation research works at the intersections of medical anthropology and global health studies with specific focuses in questions of care, disease and the body, and the materialisms of health and biotechnology to better understand how health policies and infrastructure translate into the practices and experiences of everyday life. Her dissertation fieldwork examines healthcare policies, practices, and infrastructure in Pakistan with a particular focus on vaccine culture, attitudes, and practices.

2:50 pm

Jacqueline Benson

Mentors: Safa Browne, MPH and Caroline La Rochelle, MPH

An Evidence to Action policy brief: Promoting college vaccination in the United States

Abstract:

Vaccines are critical public health tools to prevent outbreaks in the university setting. However, vaccine uptake among youth and adolescents is insufficient. College students may have a heightened risk of exposure to, and adverse consequences from, an infectious disease due to their living conditions and common social practices. Unfortunately, colleges vary significantly in their vaccine-related policies and often have insufficient outbreak plans. Nevertheless, due to attitudes towards health-related decision-making shifting, the college years are ideal for interventions to promote vaccine use. To address this issue, this brief aimed to understand (1) barriers college students face to receive vaccines, (2) attitudes about vaccine uptake, and (3) current university vaccine policies and enforcement strategies. A literature review was conducted to inform a brief to promote vaccine uptake at United States colleges and universities. The literature synthesis indicated that (1) universities should develop outbreak plans, (2) providing vaccine education and investing in student leaders can decrease vaccine hesitancy, (3) decrease additional barriers students face to receiving vaccines and, (4) universities can partner with key stakeholders to vaccinate students and decrease costs and barriers institutions face. The specific recommendations within this policy brief, if undertaken by university and college stakeholders, may serve to increase the uptake of vaccines in the college population and reduce transmission and adverse outcomes from communicable disease.

Jacqueline Benson is a Master of Public Health candidate expected to graduate in May 2021. She earned a Bachelor of Science degree in biology from St. John's University with a minor in chemistry. She works as a health disparities epidemiology research fellow at Nemours Children's Hospital in the Office of Health Equity and Inclusion. Following the completion of her degree she hopes to pursue a career in health policy, with a focus on youth and adolescents to bridge the gap between research and policy.

3:10 pm

Jamie Song

Mentors: Douglas Wiebe, PhD; Eugenia South, MSPH, MD; and Sara Solomon, MPH

Injustices in pandemic vulnerability: A spatial-statistical analysis of the CDC social vulnerability index and COVID-19 outcomes in the U.S.

Abstract:

The COVID-19 pandemic has exacerbated health injustices in the U.S. driven by racism and other forms of structural violence. Research has shown disproportionate impacts of COVID-19 morbidity and mortality in the most marginalized communities. We examined the associations between COVID-19 cumulative incidence (CI) and case-fatality risk (CFR) and the CDC's Social Vulnerability Index (SVI), a composite score assessing various forms of marginalization and vulnerability to disaster events. Using county-level data from national databases, we ascertained four covariates, and employed negative binomial regression to evaluate relationships between SVI and COVID-19 outcomes. Optimized hot spot analysis identified hot spots of COVID-19 CI and CFR, which were compared in terms of SVI using logistic regression. Negative binomial regression showed that counties in the top SVI quintile reported 13.7% higher CI ($p < 0.001$) than those in the bottom quintile. Additionally, each unit increase in a county's SVI score was associated with a 0.20% increase in CFR ($p < 0.001$). Logistic regression analysis showed that counties in the lowest SVI quintile had significantly greater odds of being in a CI hot spot than all other counties, yet counties in the highest SVI quintile had 63% greater odds ($p = 0.008$) of being in a CFR hot spot than counties in the lowest quintile. We demonstrated a significant relationship between SVI and CFR, but the relationship between SVI and CI is complex, likely affected by covariates, and warrants further investigation. SVI may help elucidate unequal impacts of COVID-19 and guide prioritization of vaccines to communities most impacted by structural injustices.

Jamie Song is an aspiring public health data analyst with experience in epidemiology, biostatistics, and geospatial analysis. He is particularly interested in bringing together data, novel analytical methods, and effective communication to push forward public health advocacy and action. Outside of the classroom, Jamie loves to cook for friends, play guitar, learn languages, and explore cities on public transit. After graduating with his MPH, Jamie hopes to gain experience in GIS and epidemiology while working on urgent public health issues like substance use, HIV/HCV infection, and COVID-19 recovery efforts.

3:30 pm

Gillian Terlecky

Mentor: Marjie Mogul, PhD

**Research and evaluation through a home visitation lens:
A case study on the Maternity Care Coalition**

Abstract:

Maternal and child health home visiting programs in the United States serve thousands of families every year, but little is known about how each organization measures their outcomes and evaluates their successes. This case study explored the professional opinions of staff at one home visiting organization, the Maternity Care Coalition, with regard to their experience with research and evaluation, key challenges or successes they have encountered in their role, and potential areas for improvement. We conducted 9 interviews with stakeholders from various levels of MCC's organization. Each interview was recorded and transcribed using Microsoft Office. Interview transcripts were coded using NVIVO and analyzed for thematic recurrence by two independent coders. Primary themes included: a desire for an integrated data system, frustration over data sharing and ownership, significant employee engagement, improved evaluation of agency relationships, and high hopes for the organization's future research and evaluation practices. The findings from this study suggest a need for an integrated data repository system that streamlines multiple technical data sources with opportunities to expand, establishing a formal data sharing agreement protocol, and an improved approach to building research-oriented relationships that fit MCC's mission. These results can help other organizations interested in developing and implementing maternal and child health home visiting programs.

Gillian Terlecky is a Master of Public Health candidate at the University of Pennsylvania, graduating in May 2021. She received her BS in Public Health with a minor in Political Science from Drexel University in 2015. After graduation, she hopes to pursue a career in programmatic evaluation with a particular emphasis on evaluating maternal and child health outcomes.

3:50 pm

Leena Kasa

Mentor: Ashlee Murray MD, MPH

**Exploring the impact of race on IPV screening in the emergency department
of a metropolitan pediatric hospital**

Abstract:

Research highlights racial disparities among those experiencing intimate partner violence (IPV), yet little is known about disparities in screening for IPV in the emergency department (ED). This study examined variability in pediatric caregiver IPV screening rates within a metropolitan pediatric ED across patient race and explored potential reasons for such variability. This was a mixed-methods study using quantitative data on IPV screening rates over 4 years (along with patient race and, if applicable, the reason for no screening) and qualitative data from semi-structured interviews with ED providers. Analyses compared rates of IPV screening and rates of screen deferral with and without documentation based on race. Assessment of the data showed that Black caregivers of patients were more likely to be screened for IPV compared to white caregivers ($p < 0.05$) and Black caregivers of patients were more likely to have a deferred screen with no documentation than white caregivers ($p < 0.05$). Following seven interviews of clinicians, preliminary qualitative results showed that the questions used did not elicit adequate answers regarding the role of race in IPV screening processes, leading to the need to redesign this component of the project. The significant differences in screening and documentation rates indicate disparities in IPV screening procedures within EDs. The next steps for this study are to revise our interview process in order to facilitate ascertainment of information regarding potential explanations for IPV screening variability that, in turn, may help inform policies to improve IPV screening across EDs.

Leena Kasa graduated from Widener University in 2019 with a dual degree in Biology and Environmental Science and will be graduating from the University of Pennsylvania in May 2021 with a Master of Public Health. Leena began her career as a research assistant studying hormones and behavior and plans to pursue a career in public health research, particularly in health disparities, with plans to pursue a clinical degree as well.

Thursday, May 6, 2021

To join via Zoom, click [here](#)

10:05 am

Charlotte DelBarba

Mentors: Kristen Feemster, MD, MPH, MSHPR, FAAP; Dana Perella, MSPH; and Michael Pietrowski, MPH

Examining case characteristics and vaccine uptake during a 2019 university outbreak

Abstract:

In recent years, there has been an emergence of new outbreaks, particularly among highly vaccinated individuals interacting in congregate settings, leading to a national increase in disease incidence. We aimed to describe the progression of a 2019 mumps outbreak associated with Temple University alongside measles, mumps, and rubella vaccine (MMR) uptake in the study population. We conducted a descriptive secondary analysis of mumps cases and MMR doses administered within the city that were reported to the Philadelphia Department of Public Health (PDPH) over the five month outbreak (February 2019 through June 2019). Cases were reported to the PDPH as part of routine disease surveillance and investigated at the time of the outbreak, while MMR dose data were obtained from the PDPH city-wide immunization registry. A total of 188 mumps cases were reported as being associated with the Temple University outbreak. Cases primarily occurred among undergraduate students (n=104, 55%) and the majority were highly vaccinated with 2 doses of MMR (n=115, 87%). Commonly reported risky behaviors included residing in an off-campus apartment or on-campus dormitory and participation in Greek life. Following a PDPH outbreak recommendation for third dose MMR, 5,790 doses were administered to individuals ages 18 to 24 years old. These results highlight the challenges associated with identifying and controlling the propagation of an outbreak in a university setting. Targeted interventions and policy aimed at expanding the scope of public health response, mitigation, and control efforts during outbreaks on university campuses may reduce the breadth and magnitude of disease.

Charlotte DelBarba graduated from the College of Charleston in 2019 with an undergraduate degree in Public Health and will graduate from the University of Pennsylvania's MPH Program in May 2021. She currently works at the Philadelphia Department of Public Health's Division of Disease Control on vaccine-preventable diseases and COVID-19 response. Upon graduation, she plans to continue her career in public health with a focus on infectious disease and epidemiology.

10:25 am

Abby Dolan

Mentors: Heather Klusaritz, PhD, MSW; Jesse Nodora, DrPH; and Marian G. Acevedo Alvarez, MD

Cultural understanding of Latina/x women and girls and its impact on bladder health research

Abstract:

There is a dearth of bladder health research in the Spanish speaking, Latina/o/x population in the United States. This project aimed to: 1) help a national bladder health research consortium cultivate an understanding of cultural preferences in regards to identity terminology and 2) inform the development and adaptation of their recruitment materials and survey instruments for use in this population. To accomplish this, a review of the literature was conducted to determine: 1) What are preferred identity terms for this population? and 2) What factors impact preference for identity terminology? The second phase of this project was a review of the results from previously conducted focus groups with Spanish speakers to identify any cultural nuances that may have been lost in the translation from Spanish to English. The literature review revealed that the term "Latinx" is not uniformly recognized or used across populations that identify as Hispanic or Latina/o. In comparing the results of the qualitative project with the themes I abstracted when listening to the audio of the focus groups, I found that the codebook used by the research team captured most themes I identified. However, a shortcoming was that the codebook did not neatly capture discussions related to cultural experiences. This review underscores the fact that racial and ethnic identities are very personal and not always encompassed by research studies. The experience of bladder health is not universal; despite many commonalities captured by the research team during coding and analysis, cultural themes deserve further focus and study.

Abby Dolan graduated from the University of Michigan in 2016 with a BA in Psychology and Spanish and a minor in Environmental Science. She is currently a Project Manager at the Center for Emergency Care Policy and Research where her work focuses on health services research and the opioid epidemic. In addition to substance use research, Abby has a special interest in the health of pregnant individuals who are incarcerated, the provision of culturally appropriate healthcare, and working in community research.

10:45 am

Lakhaya London

Mentors: Emma Sartin, PhD, MPH, CPST and Allison Curry, PhD, MPH

The impact of non-driving related license suspensions: A qualitative study of New Jersey drivers

Abstract:

Poor transportation is a known barrier to health, yet many people do not consider driver license suspension when assessing transportation hurdles. Contrary to popular belief, majority of driver license suspension happen due to non-driving related (NDR) reasons like failure to appear in court or failure to pay a fine. Presently, license suspensions studies focus on reporting statewide prevalence of NDR suspensions including the demographics of drivers and they tend to highlight the policies or laws surrounding the topic. Yet, no studies have been found that look at the personal experiences of drivers and their families. Thus, we conducted a qualitative study on the first-hand accounts of individuals who have NDR license suspensions with a goal of assessing the impacts of suspension on their social, economic, physical, and mental health. Fourteen interviews were conducted over the phone using a semi-structured guide. Participants ages ≥ 18 years with a current NDR license suspension were recruited via convenience sampling throughout New Jersey (NJ). Interviews were transcribed with the first three transcriptions selected for open coding to develop the preliminary codebook. Coders then used NVivo12 to highlight defined nodes/codes on the remainder of interviews. We strived for 80% intercoder reliability. Themes were contrived using node summaries. The perspectives of NJ drivers highlighted adverse experiences when license lost occurred. Results will inform the development of state policies surrounding license suspension while improving the diversity of literature in transportation and public health.

Lakhaya London graduated cum laude from Rutgers, The State University of New Jersey in 2018 with a degree in Health Sciences and will graduate from the University of Pennsylvania MPH program in 2021. She is currently an intern at the Southern New Jersey Perinatal Cooperative researching post-partum care. Upon graduation, Lakhaya plans on pursuing a career in maternal and child health within a non-profit organization.

11:05 pm

Nia Lucas

Mentor: Sherry Morgan, PhD, MLS, RN

Exploring culturally-relevant supports and barriers to treatment for substance use disorder in Latinx immigrant communities: A systematic review

Abstract:

According to the National Survey on Drug Use and Health, 3.7 million Latinx individuals living in the United States were diagnosed with substance use disorder (SUD) in 2018. Data show that 90% of Latinx individuals diagnosed with SUD did not receive treatment for their conditions. When considering that 33% of the U.S. Latinx population are immigrants, it is important to better understand the barriers to treatment experienced by this diverse subpopulation. While research has been conducted on SUD-related outcomes in Latinx communities, there are significant gaps in the literature surrounding treatment experiences specific to Latinx immigrants. The present systematic review aims to assess the current literature on barriers to treatment and culturally appropriate support available for Latinx immigrants living with SUD in the United States. Published articles from the PubMed and Embase databases were included in the review if they were published in English between 2000-2020 and discussed either barriers to treatment or culturally relevant support related to SUD for Latinx immigrant populations. The 'NIH Study Quality Assessment Tools' were utilized to compare the quality of studies included for analysis. The results of this review can be used to inform policy and programming efforts aimed at reducing barriers and providing culturally tailored support for those living with SUD in Latinx immigrant communities.

Nia Lucas graduated from Emory University in 2019, where she studied biology and global health. She is interested in research and programming aimed at addressing health disparities in Latinx communities. After graduation, she will be pursuing a medical degree and hopes to practice global medicine in her future career as a physician and public health practitioner.

11:40 pm

Devina Persaud

Mentors: Carol McLaughlin, MD, MPH, MSCE, DTMH and Sherry Morgan, PhD, MLS, RN

Impact of community health worker use of mobile technology on maternal/child health service utilization in low- and middle-income countries: A narrative synthesis

Abstract:

While significant progress has been made in maternal, newborn, and child health (MNCH) within recent decades, maternal and child mortality continues to contribute significantly to the burden of disease and low- and middle-income countries (LMIC). Community health workers (CHW) are an integral part of primary healthcare delivery in LMIC, and have experienced an increase in workload without an increase in resources, support, and training, creating burnout and a decrease in efficiency. In rural communities of LMIC, CHW are used to complete follow-ups, track development, and refer people to healthcare services. Mobile health technology, known as mHealth, has potential to manage the workload for CHW, allowing them to connect to other providers, manage data, and receive reminders to improve accuracy and efficiency. This literature review aims to provide an overview of current mHealth programs used by CHW in LMIC, and critically review what components of these programs are effective in increasing the uptake of MNCH services. A literature search across three databases was performed, and seventeen articles were included in the review. After analysis, it was concluded that mHealth technology was most useful across three main categories: data collection, communication, and health system integration. By identifying the most effective elements, governments, non-governmental organizations, and community-based organizations can prioritize these features and create cost-effective and useful protocols for CHW to improve MNCH. Future research is needed, specifically for experimental studies, to look at how mHealth directly affects maternal and neonatal outcomes.

Devina Persaud was born and raised in New York, where she attended Brooklyn College as a Biology and Chemistry double major. After studying the basic sciences and completing pre-med curricula, she realized that public health was the cornerstone of community wellness and population health. After graduating from the MPH program, Devina plans to work in the public health world and eventually pursue a career in medicine.

12:00 pm

Ashley J. Woodards

Mentor: Emma Sartin, PhD, MPH

Who is and is not an organ donor? A statewide analysis of licensed drivers in the state of New Jersey

Abstract:

In the United States, approximately 107,000 people are currently on the waiting list for a lifesaving organ transplant, and an average of 17 people on the waiting list die every day. Although 90% of adults support organ donation, only 60% are registered donors. Increasing the number of individuals who are registered organ donors to be more consistent with those who approve of organ donation would translate into millions of additional potential donors. In the United States, New Jersey (NJ) has been documented as having one of the lowest transplant rates. However, there has not been much investigation into who is and who is not a registered organ donor in this state. By understanding who registers as an organ donor, research can better highlight disparities and inform the development of more effective intervention and policy efforts to increase overall organ donation rates. Thus, the aim of this epidemiologic study was to utilize a novel source of data, the New Jersey Safety and Health Outcomes data warehouse (NJ-SHO), to characterize who is registered as an organ donor in the state of NJ.

Ashley Woodards graduated from the College of William and Mary in 2017 and will graduate from the University of Pennsylvania's MPH program in 2021. She is currently a Project Manager in the School of Nursing under the NewCourtland Center for Transitions in Health. Ashley plans to continue to hone her skills in preparation for a PhD and career in Epidemiology.

12:20 pm

Caroline A. Broomfield

Mentor: Sarah M. Wood, MD, MSHP

**Impact of the COVID-19 pandemic on contraceptive-seeking patients
at an urban adolescent medicine specialty clinic**

Abstract:

Adolescent healthcare has rapidly adjusted to address challenges during the COVID-19 pandemic. However, little research has analyzed disparities in patients accessing contraceptive care in adolescent clinics during the pandemic. This project aimed to describe characteristics of adolescent patients accessing contraceptive care, and visit completion, pregnancy testing rates, and contraceptive use before and during the COVID-19 pandemic. This cross-sectional study used electronic health record-abstracted data from adolescent or young adult patients assigned female at birth from a Children's Hospital of Philadelphia Adolescent Medicine (AM) clinic who had been prescribed hormonal birth control from 2018-2020. Analysis was conducted using chi square testing and logistic regression models. Between 2018 and 2020, there were 12,381 AM visits, with 2,382 unique patients. Pregnancy testing rates (75.0% to 66.0%, $p < 0.01$) and no-show rates (12.7% to 9.3%, $p < 0.1$) decreased during the pandemic. Black patients consisted of a smaller proportion of patients seen during the pandemic (33.9%) compared to before (41.6%), $p < 0.1$. Black patients were 2.06 times as likely to receive long acting reversible contraception (LARC) (95% CI: 1.62 to 2.61, $p < 0.01$) than non-Black patients. Black patients during the pandemic were 0.41 times as likely to receive LARC as Black patients pre-pandemic (95% CI: 0.22 to 0.76, $p < 0.01$). A smaller proportion of patients during the pandemic were uninsured (1.9%) compared to before (4.2%), $p < 0.1$. There were differences in utilization of contraception and contraceptive services before and during the COVID-19 pandemic and by racial and socioeconomic demographics.

Caroline A. Broomfield graduated from Haverford College with a Bachelor of Science in Psychology in 2015 and will graduate from the University of Pennsylvania MPH program in 2021. She has research experience in behavioral health and has pursued interests in sexual reproductive health, adolescent health, and health education. Caroline is currently a grants writer at PolicyLab and the Center for Pediatric Clinical Effectiveness at Children's Hospital of Philadelphia.

12:40 pm

Latisha D. Thompson, MSW, LSW

Mentors: Michelle Munyikwa, PhD and Jaya Aysola, MD, DTMH, MPH

**“Trust the Process”:
A guided approach to evaluating a social needs response program
in Philadelphia during COVID-19**

Abstract:

The COVID-19 pandemic is exacerbating existing social and economic inequities in the US. In turn, burgeoning cases of unmet social needs are also contributing to the prevalence of COVID-19 morbidity and mortality. Health systems can ameliorate this dual crisis by identifying the social risk and addressing the social needs of patients. Nonetheless, there is minimal evidence of how to approach evaluation of these programs from the patient experience. The aim of this project was to describe the process, and to provide insight on the relevant applications and approaches, for successful evaluation of a health system-based social needs response program during the COVID-19 pandemic. We utilized the implementation science framework RE-AIM to understand and guide our evaluation planning, focusing on the dimensions of Reach, Effectiveness and Maintenance to assess the patient experience. Common public health evaluation tools, such as the logic model and Gantt chart, were also described to help plan successful evaluation of the intervention. Upon completion of evaluation planning, we submitted a protocol for IRB determination. The project's next steps include honing the featured interview protocol, beginning patient recruitment, and conducting semi-structured interviews on the structure, process and outcomes of the Social Needs Response Team. In addition, the utilization of this framework and tools has illuminated further evaluation of other relevant stakeholders. This evaluation planning process of the health system-based social needs response program can serve as a demonstrative model for similar intervention programs, and highlights the opportunity for public health student leadership.

Latisha D. Thompson MSW, LSW is a proud Returned Peace Corps Volunteer (St. Lucia, 2015-2017) and alumna of Howard University and Penn's School of Social Policy and Practice. Currently, Latisha practices as a clinical social worker within Penn Medicine's Home Health and Hospice division serving homebound residents in West Philadelphia. Upon completion of the MPH program, she will continue her work focusing on the patient experience with the SNRT evaluation team.



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