JEFFERSON COLLEGE OF POPULATION HEALTH

PRESENTATIONS AT THE
American Public Health Association's Annual Conference

Sunday, November 3 – Wednesday, November 6

Booth #107

Jefferson
Thomas Jefferson University

2:00 PM - 3:00 PM | 2049.0 | Poster

Experiences with Police-Assisted Diversion in Philadelphia

Rebecca Koppel, MSW, MPH(c)
Ruth Shefner, MPH, MSW
Rosemary Frasso, PhD, MSc, MSc, CPH
Evan Anderson, JD, PhD,

People with substance use disorders (SUD) are at high risk of arrest and incarceration. As many as a third of people in the U.S. who use heroin pass through a prison or jail each year. Drug dependence has been documented in more than half of jail inmates and state prisoners. High prevalence of SUD and elevated overdose risk after re-entry have concentrated attention on jails and prisons as logical sites for intervention. But jails and prisons are not the only place to intervene within the Criminal Justice System. According to the Sequential Intercept Model (SIM), opportunities to provide treatment and other services, rather than merely punishment, exist throughout the criminal justice continuum. Recognition that police frequently encounter individuals experiencing SUD, but that punishment is often counterproductive, has motivated the idea of police-assisted (or law enforcement assisted) diversion (PAD, LEAD). This pre-booking diversion model has spread from Seattle to a number of other cities in recent years. Philadelphia launched a PAD program in early 2018 in which police officers can direct individuals to a treatment facility when an individual would otherwise have been arrested for a low-level criminal offense (a "stop referral") or when an individual independently asks the police for this assistance (a "social contact referral"). This presentation will present findings from semi-structured interviews exploring the perceptions and experiences of fifteen individuals who entered through a stop referral and fifteen individuals who entered the program through a social contact referral.

2:00 PM - 3:00 PM | 2027.0 | Poster

Problem gambling among college students: Prevalence, motivation, and sources of social support

Edward Chiyaka, PhD(c)
Sonia Alemagno, PhD
Billy Oglesby, PhD, MSPH, MBA

Background: Problem gambling has been shown to be associated with several mental health outcomes, including higher rates of depressive symptomatology, increased risk of alcohol and substance abuse disorders, higher anxiety, and poorer overall general health. However, much of the scientific literature is focused on adult populations and does not explore differences among different gambling behaviors. This research attempts to better understand the prevalence of problem gambling among college students, its correlates, and differences across socio-demographic groups and their sources of social support. **Methods:** A sample of 6,013 students (ages 15-67) from a Midwestern public university participated in the study in February, 2014. Students were asked a range of questions about their socio-demographic characteristics, sources of money, sources of social support, motivation for gambling, and gambling behavior. We assessed differences stratified by gambling risk status using Chi-square tests and ANOVAs. **Results:** About 4.2% of college students were at risk for developing problem gambling. Students at risk of developing gambling problems were more likely to be older, male, and have a lower grade point average. High risk college gamblers were more likely to seek help from parents, friends, and gamblers anonymous. **Conclusions:** There is an identifiable population of college students at risk for problem gambling, with older male students being at higher risk. Health care professionals and college administrators should assess gambling activities on their campuses and develop tailored interventions designed to address risks.

2:00 PM - 3:00 PM | 2048.0 | Poster

Racial/ethnic disparities in perceived healthcare communication quality in the US: 2018 HINTS

Hee Jun Kim
Hee-Soon Juon, PhD, MSN
Hyang-Sook Kim

Purpose: This study aimed to explore current racial/ethnic disparities in the level of perceived patient-provider communication quality (PPPCQ) in the United States and identify sociodemographic factors associated with the disparities. **Methods:** A cross-sectional analysis was conducted using nationally representative data from the Health Information National Trends Survey 5 Cycle 2 (January – May 2018). Descriptive statistics, multivariable linear regression analyses examined associations with weighted analysis using svy from STATA version 15. PPPCQ scores were the composite measure of patients' ratings of communication quality (n=7; alpha=.91). Racial/ethnic groups were divided into 5 categories: Non-Hispanic Whites (NHWs), African-Americans (AAs), Hispanics, Asians, and Other. **Results:** The mean scores of PPPCQ were 24.1 (95% CI: 23.7-24.5) for NHWs, 22.9 (95% CI: 22.2-23.6) for Hispanics, and 21.8 (95% CI: 20.3-23.3) for Asians [N = 3,504; NHWs (63%), AAs (14%), Hispanics (15%), Asians (4%), and Others (4%)]. A multivariate analysis revealed that Hispanics and Asians reported lower PPPCQ scores compared to NHWs (β = -1.29, p= .004; β = -2.02, p= .013; respectively), controlling for age, gender, education level, marital status, and employment status. Subgroup analyses further confirmed the disparity even among those who were fluent in English (i.e., speaking English "very well") in Hispanic and Asian groups. **Conclusions:** This finding may suggest that developing new strategies is essential to overcome healthcare communication disparity targeting Asians and Hispanics in the US beyond common solutions for the language barrier. Further studies are warranted to investigate potential factors influencing the disparities in PPPCQ.

2:00 PM - 3:00 PM | 2050.1 | Poster

Stigma of mental illness: Voices from the frontline of mental health care in rural China

Yuer Deng, MSW, MPH(c)
Anli Wang, PHD
Yin-Ling Irene Wong, PHD
Rosemary Frasso, PhD, MSc, MSc, CPH
Maosheng Ran, B.Med., M.Med., PhD
Tianming Zhang, MSW
Dexia Kong, PHD, MSW, MBE

Background and Objectives: The increasing number of persons with untreated mental illness presents a pressing public health issue in China. In 2016, over 160 million Chinese people living with mental illness have never received any treatment.Pervasive stigma is a significant barrier leading to treatment refusal and non-compliance. In particular, stigmatizing or supportive attitudes held by mental healthcare providers (MHP) could be a double-edged sword by either perpetuating or mitigating self-stigma of persons with mental illness (PMI). This study explores frontline MHP's attitudes towards PMI and challenges they faced at work, utilizing qualitative methods. **Methods:** Four focus groups were conducted with 36 MHP from a rural county healthcare system in southwestern China. Focus groups were recorded and transcribed verbatim. The team employed a directed content analysis approach. All transcripts were double-coded by three bilingual team members who are native Chinese speakers. Coding discrepancies were resolved by consensus. Once coding was complete, the team convened to organize resultant codes into thematic categories. **Results:** MHP recruited from county, township, and village levels varied in educational background, professional qualification, and experience of working with PMI. Thematic categories identified across all groups include stigmatizing attitude towards PMI, perceived impact of stigma on PMI, and training initiatives to improve mental health services delivery. There are differences in the experience of associative stigma at the three levels with county MHP reporting more stigma. **Implications**: The results provide critical insights to inform the development of stigma reduction programs targeting healthcare providers.

3:30 PM - 4:30 PM | 2075.0 | Poster

Clinicians' Perspectives on Barriers and Facilitators to Perinatal Hepatitis B Care for Women and Children

Udara Perera, MPH, DrPH(c)
Hee-Soon Juon, PhD, MSN
Chari Cohen, DrPH, MPH
Alison Evans, ScD
Renee Turchi, MD, MPH
Ann Carroll Klassen

Hepatitis B virus (HBV) is the most common serious liver infection and leading cause of liver cancer worldwide. Chronic HBV infection and liver cancer in Asian and African immigrants are among the most serious, but frequently neglected racial health disparities in the U.S. Health care providers play a crucial role in preventing perinatal HBV transmission, by providing testing, maternal education and care for mothers and neonates. The objectives of this study were to determine provider-level knowledge, barriers, and facilitators to care for HBV+ women and determine the most helpful tools in providing care to women diagnosed during pregnancy. Ten interviews with obstetricians, gastroenterologists, neonatologists, pediatricians, family practitioners and nurses were conducted using open-ended questions. Inductive content analysis was used to identify emerging themes in the data. Clinicians reported patient-related barriers, including lack of hepatitis B knowledge, stigma and misconceptions surrounding HBV, low language skills and health literacy levels, phobia of frequent bloodwork, lack of health insurance coverage, and lack of compliance to medication. Most frequently mentioned provider barriers include not having necessary patient educational materials in various languages, and general practitioners not seeing the need to refer patients to specialty care. Facilitators to care that were identified include patient and provider level education on hepatitis B and the creation of perinatal HBV materials in diverse languages. The reported barriers have been used to highlight new potential intervention targets and tools to improve patient outcomes, including developing strategies to better educate providers and creating and disseminating patient literature in various languages.

3:30 PM - 4:30 PM | 2073.0 | Poster

Reproductive Justice, Health Equity and Community Partnerships: Exploring the Role of Motherhood Among Young Women of Color in a Home-Visiting Program

Kirby Wycoff, PsyD, MEd, MPH
Jeanne Felter, PhD

Background: Understanding the complexities of maternal and child health disparities across historically oppressed communities is of interest to practitioners, policymakers, parents, advocates and researchers alike. In the United States, Black women are 3-4 times more likely to die than white women for pregnancy related illness. Among Latina mothers, low rates of health care utilization, lower rates of insurance coverage and delayed prenatal care are related to adverse pregnancy related outcomes. Persistent, structural oppression and racism are hypothesized to be related to poor maternal health outcomes There is a need for scholarly inquiry that explores the relationships between chronic stress and perinatal health among mothers of color within a reproductive justice framework. **Methods:** This qualitative research study (embedded in a larger Community-Based Participatory Research project) utilizes a two-pronged data collection and analysis process. Interpretative Phenomenological Analysis (IPA) was used to explore the lived experiences of motherhood among young women of color and ethnographic participant-observation data was collected and analyzed to understand the culture of motherhood. All participants were enrolled in a Maternal and Child Health Home-Visiting Program with the partner organization in Southeastern, Pennsylvania. **Results:** Maternal trauma, perinatal mental health, relationships with partners and birthing experiences all emerged as relevant themes for mothers participating in the home-visiting programming. Cultural differences across the Latina and African American mothers will be an area of focus. **Conclusions:** Understanding maternal health inequities, particularly among women of color, has important implications for understanding how maternal and child health initiatives are implemented across different cultures.

5:00 PM - 6:00 PM | 2090.0

Well child care use during the first 2 years of life use after intrauterine opioid exposure

Neera Goyal, MD, MSc
Jessica Rohde
Esther Chung
Vanessa Short, PhD, MPH
Stephen Patrick
Diane Abatemarco, PhD, MSW

Background: For mothers with opioid use disorder, many challenges threaten engagement in pediatric primary care, including perceived stigmatization and discrimination, legal and child custody concerns, housing instability, and mental health issues. Knowledge gaps persist regarding the adequacy of well child care (WCC) for children affected by intrauterine opioid exposure (IOE). **Objective:** Determine the association between IOE and WCC adequacy over the first 18 months of life. **Methods:** Retrospective study, using PEDSnet data, of infants born from 2011-2016 who received pediatric primary care in a system spanning 35 sites across 3 states. IOE, including but not limited to diagnosis of neonatal abstinence syndrome (NAS), was ascertained using Systematized Nomenclature of Medicine – Clinical Terminology (SNOMED-CT) and ICD-9 and/or ICD-10 codes. Primary outcome was WCC adequacy based on AAP recommendations and derived from CPT codes. Adequate WCC in the first year was defined as ≥ 1 postnatal or 1 month visit, and completed 2, 4, 6, 9, and 12 month visits. To account for the increased possibility of prolonged birth hospitalization during the first months of life among infants with IOE, a sensitivity analysis relaxed the definition of adequate WCC, measuring only those visits at 4 months of age or after. Adherence in the second year was defined as completing 15 and 18 month visits. Multivariable logistic regression tested the relationship between IOE and WCC use, adjusting for race, ethnicity, sex, insurance, birthweight, birth year, complex chronic conditions, zip code-level poverty, zip code-level urbanicity, and site of care. **Results:** Among 11,334 infants, 236 (2.1%) had a diagnosis of IOE, the majority of whom (80.1%) were classified as having NAS. Median number of WCC visits was 8 (interquartile range [IQR] 6, 8) among non-exposed infants, and 6 (IQR 5, 7) among those with IOE. Overall, 54.1% of the sample were deemed to have adequate WCC in the first year of life, and 57.1% were deemed to have adequate WCC in the second year of life. IOE was independently associated with a lower likelihood of adequate WCC over the first year of life (adjusted odds ratio [AOR] 0.36, 95% confidence interval [CI] 0.24, 0.53). This effect size was smaller but still significant in the sensitivity analysis evaluating WCC adequacy only from the 4-12 month visits (AOR 0.55, 95% CI 0.45, 0.68). In the second year of life, IOE was still independently associated with a lower likelihood of adequate WCC (AOR 0.58, 95% CI 0.46, 0.72). Additional risk factors for inadequate WCC included Black/African American race, Medicaid insurance, and greater residential poverty. **Conclusions:** Infants with IOE, including those with NAS, experience significant gaps in WCC. Further research may focus on addressing barriers to primary care engagement for this population.

5:00 PM - 6:00 PM | 2092.0 | Poster

Housing First for People with Opioid Use Disorder (OUD) and the impact on Medication Assisted Treatment (MAT) and Harm Reduction Services

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Matt Tice, MSW
Howard Dichter, MD
Ana Stefancic, PhD
Husayn Siddiqui, BS, MPH

Background: In Philadelphia, opioid use disorder (OUD) has been one of the main drivers of the dramatic increase of unsheltered homeless persons. To address both housing and treatment needs, the city funded Pathways to Housing PA to expand their Housing First (HF) program and create a pilot service team specifically for persons with OUD. The goal of this program is to end homelessness for people with OUD by providing 1) immediate access to permanent supportive housing with no preconditions, 2) immediate access to primary care and person-centered recovery planning, including medication-assisted treatment (MAT), and 3) comprehensive overdose prevention. **Methods:** A retrospective review was used to evaluate our program and identify patterns of engagement in housing and MAT. We examined participant demographics, SUD treatment history, comorbid medical conditions, overdose rates, participant goals, and housing retention of the first 145 participants admitted into the program. **Results:** The average age of participants was 43 years (SD 10.0). The majority were male (68%), white (67%), and non-Hispanic (80%). The most common concurrent psychiatric diagnoses were mood disorders and trauma-related disorders, and the most frequently reported co-occurring chronic health conditions were Hepatitis C and HIV. Almost half of the participants were diagnosed with multiple substance use disorders. In initial evaluation, the program has provided overdose prevention education and naloxone to 100% of participants, and 26% of participants have been linked to on-site MAT. Preliminary housing retention rate of the first 83 participants was 93%. **Conclusions:** Housing outcomes are similar to those reported by other HF programs, suggesting that participants with OUD can be supported with maintaining housing and engaging in services. Additional program data is being collected regarding health status, OUD treatment, overdose rates, and participant goals and will be available at the time of presentation.

5:00 PM - 6:00 PM | 2109.0 | Poster

Pilot Study to Assess Pharmacy Students' Experiences with Naloxone

Katherine Cambareri, MPH
Rosemary Frasso, PhD, MSc, MSc, CPH
Vittorio Maio, PharmD, MS, MSPH

Background: In Philadelphia, fatal overdoses rose from 907 in 2016 to 1,217 in 2017, with 80% involving opioids. Naloxone is a prescription drug that reverses the effects of opioids on the brain and respiratory system and prevents death. Some organizations have begun to train lay people to use naloxone. To improve access, Pennsylvania instituted a naloxone standing order (NSO), putting pharmacists on the front-line of this public health intervention. Previous studies found that pharmacists face challenges to dispensing naloxone, including mixed feelings about the NSO. Pharmacy programs have been preparing students to face these challenges, but little is known about their perspectives on the NSO and related issues. **Methods:** We piloted an on-line,15-item Qualtrics survey at a mid-size pharmacy program in Philadelphia and explored students' knowledge and attitudes about the NSO and the role of pharmacists in naloxone distribution. **Results**: To date, 58 students completed the survey. Respondents reported learning about dispensing naloxone and educating patients in the classroom and in their clinical rotations. Students (41%, n=24) disagreed or strongly disagreed with the statement, "In my experience I have had enough time to educate patients on naloxone use" and 35% (n=20) of respondents disagreed or strongly disagreed with the statement, "I have been adequately trained on how to administer naloxone." Additionally, 45% (n=26) of respondents did not know where to refer a patient who could not afford to pay for naloxone. **Conclusions:** Our results suggest that while pharmacy students are receiving training, barriers to, and comfort with, educating patients persist.

5:00 PM - 6:00 PM | 2094.0 | Poster

Low threshold group-based MAT in a Philadelphia FQHC: Evaluation of the first year of implementation

Lara Weinstein, MD, MPH, DrPH
Bridget Smith, BA
Denis Ostick, BS
Alexis Silverio, MPH, CSCS, CHES, FNS-NASM
Sonika Aggarwal, BS
Robin Debates, LCSW
Ana Stefancic, PhD
Qais Iqbal, BS

Background: As in many cities, access to medically assisted treatment (MAT) in Philadelphia, while much improved, is not sufficient. Integrating treatment of OUD into primary care shows promise in destigmatizing treatment and increasing access to healthcare services. To meet the demand, our FQHC has developed a group-based model of multiple weekly psychoeducational groups for 8-12 patients led by behavioral health providers. MAT providers have brief private check-in visits with each patient during the group. We use a low-threshold, harm reduction approach and offer immediate access to treatment and support of person-centered recovery goals. We continue to offer services to patients who are not abstinent from opioids or other substances. **Methods:** A retrospective review was used to evaluate our program and identify areas of strengths and challenges to refine the model. We examined participant demographics, treatment retention, substance use, use of primary healthcare services, quality of life, and perception of care of the initial 80 patients in the first-year of the program. **Results:** The average age of the participants was 46 years (SD 10.0), 60% are male, and 57% are African American. Kaplan-Meier analysis showed a 3-month retention rate of 82% and a 6-month retention rate of 63%. Baseline QOL scores were lower than the general population. Over 90% of participants reported liking the services they received and would recommend the services to others. **Conclusions:** Our MAT program engaged a higher level of African-American patients (57%) than MAT programs city-wide (29%). Prior studies report 3-month retention rates of 67-87% and 6-month retention rates of 33-58% in similar populations. These preliminary results suggest that our approach is reaching and retaining underserved populations. Further analysis will be available at the time of presentation.

Sunday, November 3, 2019

5:00 PM - 6:00 PM | 2110.0 | Poster

Connecting Health Plan Care Managers with a Network of Enhanced Services Community Pharmacies: A Pennsylvania Case Study

Nicholas Leon, PharmD, BCPS, BCACP, FCPP
Stephanie McGrath, PharmD
Kim Coley, PharmD
David Pope, PharmD
Elizabeth Grassmyer
Melissa McGivney, PharmD, FCCP, FAPhA
Patricia Epple, CAE

Community pharmacy enhanced services networks (or CPESNs) are collections of community pharmacies that have prioritized more than just filling prescriptions. These collections of community pharmacies have demonstrated commitment to providing high quality and high integrity patient-centered enhanced services that provide demonstrable value to the health plans they work with. We aim to shed light on what a CPESN is and describe the implementation of how one such network, the Pennsylvania Pharmacists Care Network, cultivated a partnership with a health plan that organically evolved to now include explicit collaboration between pharmacies and the care managers who are employed by the health plan. Several key operational components of this collaboration that facilitate bi-directional communication will be discussed including use of a locator web application, multiple trainings for care managers, accountability reporting structures, and referral mechanisms to dial patients into the resources offered by both health plans and pharmacies. The results of health plan care managers and pharmacies are each recording and tracking referrals and outcomes will be discussed and perceptions from both groups will be shared. Sharing these learnings may enable future innovative collaboration between networks of community pharmacies and care managers (among other stakeholders) to enhance population health efforts related to accessing and engaging patients where they are, through the pharmacies they frequent, and in a way that promotes quality, accountability, access, and outcomes.

5:00 PM - 6:00 PM | 2089.2 | Poster

Older Age and Initial Surgical Treatment Among Phyllodes Tumor Patients: A SEER Database Analysis

Alberto Batista, PharmD
Brandon George, PhD, MS
David Delgado, PhD, MPH

Background: Phyllodes tumor (PT) is a rare malignancy among women worldwide accounting <1% of all primary breast neoplasms. Little evidence exists describing the stage and initial treatment for PT in older age women. **Objective:** Describe the relationship between age and initial surgical treatment for PT in older age women. **Methods:** We conducted a retrospective, cohort study using data from the Surveillance Epidemiology and End Results Program (SEER) for women 65 years and older and diagnosed with PT between 1973-2014. The main exposure of interest was age at presentation (65-70 vs. $\geq$ 71). The outcome of interest was initial surgical treatment (mastectomy vs. breast conserving surgery). The analysis adjusted for tumor size (>5cm vs. $\leq$5cm), race (Asian, Black, Hispanic, White), marital status (married/unmarried), year of diagnosis (1988-1996, 1997-2005, 2006-2014), and tumor grade (well/moderately, poorly, unknown). Descriptive statistics were used to describe the relationship between age at diagnosis and other demographic/clinical variables. Multivariate logistic regression was used to assess the association of age and initial surgical treatment. **Results:** Among the 338 women identified, 62% were 71 years and older, 55% underwent an initial mastectomy, 42% were married, and 77% were White. We found no significant association between older age ($\geq$71 vs. 65-70) and odds of initial mastectomy (OR:1.25; 95% CI:0.74-2.11). Tumor size (>5cm vs. $\leq$ 5cm) (OR:5.25; 95% CI:3.20-8.62), poorly differentiated (OR:4.24; 95% CI:1.71-10.53) and undifferentiated grade (OR:1.83; 95% CI:1.04-3.23) were associated with higher odds of initial mastectomy versus well or moderately differential grade. **Conclusion:** In this sample of PT patients 65 years and older, tumor size (>5cm), and having poorly or undifferentiated tumor grade were more likely to undergo initial mastectomy. Our study suggests we need to explore ways of increasing earlier diagnosis for PT patients associated with tumor size.

Monday, November 4, 2019

10:30 AM - 10:50 AM | 3107.0

APHA's policy statements 101: Lessons learned

Cynthia Stone, DrPH, MSN, BSN
Martha Romney, BSN, MS, JD, MPH
Carol Dabbs, MPH
Jeffrey Goodman, MPH
Eleanor Fleming, PhD, DDS, MPH

The APHA Action Board and Science Boards are offering a session to discuss the APHA policy and review process. We will offer tips on how to move an idea into a policy, how to identify policy gaps/needs, and how the JPC and Science boards review the policies. We will also discuss the Action Board Policy Mentoring program.

10:30 AM - 11:30 AM | 3099.0 | Poster

Increasing the Number of Children Who Receive Fluoride Varnish in a Pediatric FQHC

Christina Freibott, MPH
Mario Cruz, MD
Margaret Choi
Meghan DeSandro, MPH
Kari Hexem, DMD, MPH

The quarterly application of fluoride varnish can prevent childhood caries. This Quality Improvement Project (QIP) systematically increased the percentage of children receiving fluoride varnish during pediatric medical visits at a federally qualified health center (FQHC). As part of a state-wide oral health initiative, our multidisciplinary team (including a pediatrician, medical assistant (MA), dentist, and quality improvement specialist) implemented a four-month pilot program with staged interventions to increase fluoride varnish usage within the pediatric medical clinic. We employed 3 Plan-Do-Study-Act (PDSA) cycles with corresponding tests of change. The interventions consisted of: education of MAs and medical providers on the importance of fluoride varnish, process mapping to identify opportunities for improvement, integration of fluoride specific reminders and templates into the electronic medical record (EMR), increasing ease of access of fluoride varnish during medical visits, regular updates for medical team on QIP progress and reminders for the provider before entering the exam room. In four months, a run chart demonstrated that the number of patients aged 18 to 71 months that had fluoride varnish applied increased from 18.6% to 47.7%. Furthermore, the number of "high-risk" patients (those without dental homes) that had fluoride varnish applied increased from 25.0% to 62.5%. Two keys to our improvements were the ability to customize the EMR and buy in from the medical assistants. The results of this QIP can guide pediatric practices that serve vulnerable populations in how to increase application of fluoride varnish and improve dental health in children in a sustainable, low-cost manner.

10:30 AM - 11:30 AM | 3072.0 | Poster

Racial/Ethnic Disparities in Hepatocellular Carcinoma Stage at Diagnosis & Initial Treatment among Asian American Patients Aged 18-64, Diagnosed in California from 2007-2014

Saema Adeeb, MPH
Edith Mitchell, MD, FACP
David Delgado, PhD, MPH

Background: Previous research suggests that hepatocellular carcinoma (HCC) health disparities affect Asian Americans, a highly heterogeneous racial/ethnic population with many subgroups. **Objective:** Controlling for sociodemographic and clinical characteristics, we explore the association of Asian American race/ethnicity with stage at presentation and initial treatment among patients diagnosed with HCC in California. **Design/Methods/Source:** A retrospective, cohort study using Surveillance, Epidemiology and End Results Program (SEER) data from 8,484 Californians of Asian and White race/ethnicity, aged 18 to 64, and diagnosed with HCC between 2007-2014. Descriptive statistics, chi-square tests, univariate and multivariate logistic regression performed in SAS v9.3. **Results:** Filipinos (OR:1.691, 1.339-2.137) and Koreans (OR:1.339, 1.003-1.788), earlier diagnosis 2007-2010 (OR:1.228, 95%CI:1.126-1.340), males (OR:1.374, 95%CI:1.224-1.542), Greater California (OR:1.224, 95%CI:1.091-1.374) and Los Angeles (OR:1.270, 95%CI:1.112-1.450) residence, and patients with public (OR:1.249, 95%CI:1.135-1.375) and no insurance (OR:2.193, 95%CI:1.783-2.698) disproportionately presented at regional/distant stage of disease. Receipt of treatment was significantly higher among Chinese (OR:1.760, 95%CI:1.421-2.180), Koreans (OR:1.916, 95%CI:1.373-2.675), Vietnamese (OR:1.772, 95%CI:1.418-2.215), patients with localized stage (OR:4.075, 95%CI:3.622-4.583), and earlier diagnosis 2007-2010 (OR:1.123, 95%CI:1.010-1.248). Age group 50-64 (OR:0.830, 95%CI:0.710-0.971), males (OR:0.720, 95%CI:0.630-0.822), single status (OR:0.725, 95%CI:0.648-0.812), and patients with public (OR:0.454, 95%CI:0.401-0.513) and no insurance (OR:0.171, 95%CI:0.114-0.256) were associated with reduced odds of receiving treatment. Racial/ethnic disparities in stage at diagnosis and receipt of treatment remained after adjustment for sociodemographic and clinical characteristics. **Conclusion/Public Health Implications:** Understanding disparities in HCC staging and treatment can help address gaps in care for specific populations. Public health programs and policies can be improved through targeted focus on early detection and intervention in high at-risk populations.

10:30 AM - 11:30 AM | 3088.0 | Poster

An Equitable Model for Bidirectional Global Health Education

Myles Dworkin
Elizabeth Krebs
Ellen Plumb, MD
James Plumb, MD, MPH
Rosemary Frasso, PhD, MSc, MSc, CPH
Damas Dukundane

Background: Medical student interest in global health education is increasing worldwide. Study abroad opportunities, however, are often unidirectional in which students from high income countries have opportunities that others do not. These traditional exchange models have allowed 30% of US medical graduates to participate in global health experiences but do nothing to facilitate a similar experience for students from low and middle income countries (LMICs). The advent of partnerships between institutions in the US and LMICs have sought to address this issue, but barriers remain, such as cost, access to vaccinations, and trip orchestration. Thomas Jefferson University (TJU) and the University of Rwanda (UR) have developed a model that provides clinical exposure for students at both schools while addressing common barriers to student involvement. **Methods:** In 2007, a memorandum of understanding was created between TJU and UR establishing a bidirectional exchange program. Each summer, TJU students visit Rwanda and join UR students in collaborative public health projects while observing in hospitals. Annual funding allows UR students to travel to TJU to gain clinical experience and attend didactic sessions. TJU student journals were reviewed to understand the value of the experience and UR students were queried about their time at TJU. **Results:** Each year an average of six TJU and four UR students participate in the exchange. This has led to the creation of several projects in Rwanda including yearly public health outreach programs, income generation initiatives, and collaborative student research projects. UR students have gained clinical exposure to US practices in family medicine, emergency medicine, obstetrics-gynecology, and surgery. Recent UR participants reported enhanced exposure to evidence-based medicine and multidisciplinary approaches to clinical care while TJU participants improved their cultural competency and ability to work within diverse teams. **Discussion:** This equitable exchange fosters student global health interest in the US and Rwanda. It unites medical student peers in solidarity while providing equal opportunities to both student bodies and reducing barriers that prevent LMIC students from studying abroad. Bilateral program evaluation has led to continuous improvements like the development of new workshops and mentoring opportunities aimed at improving global health research capacity.

1:00 PM - 2:00 PM | 3184.0 | Poster

Growing Old Behind Bars: Development of a Dementia Training Module for Correction Officers

Susan Connor, OTD, OTR/L, CCHP
Catherine Piersol, PhD, OTR/L, FAOTA

Between 2000 and 2009, the United States prison population increased by 16 percent while the number of inmates aged 55 years or older increased by 79 percent. Coupled with a high frequency of common risk factors for dementia among inmates such as traumatic brain injuries, substance abuse, poor nutrition, and low educational achievement, the rising older adult population increases the potential for a rise in the number of inmates with dementia. This situation presents a challenge to the prison system. Behavioral symptoms associated with dementia render inmates vulnerable to disciplinary infractions or victimization and result in increased costs and risks associated with disciplinary proceedings, injuries resulting from victimization, and the like. Correction officers might be the first to observe dementia-related changes in function and behavior but lack the foundational knowledge and skills required to interact effectively with inmates with dementia. A program that effectively trains correction officers to understand that "difficult" behavior may actually be a symptom of dementia, recognize the difference between purposefully disruptive behavior and the behavioral symptoms of dementia, and manage behavioral symptoms will allow correctional institutions to operate in a safer, more efficient manner. Yet advocates identify correction officer training as an area in need of significant improvement. This poster will illustrate the development of an online, self-directed dementia training module for correction officers. Evidence supporting its development, theoretical framework employed, and process of designing and modifying the module will be presented. Additionally, an emerging role for occupational therapy professionals in correctional settings will be highlighted.

1:00 PM - 2:00 PM | 3197.0 | Poster

Tobacco Retailer Location Predicts Secondhand Smoke Exposure among Adults in the Kensington Neighborhood of Philadelphia, PA.

Russell McIntire, PhD, MPH
Seif Butt, MPH

Background: Philadelphia has nearly twice the tobacco retailers per capita compared to other major U.S. cities. Among Philadelphia neighborhoods, Kensington has one of the highest tobacco retailers per capita. Researchers have shown that tobacco retail proximity impedes cessation behavior among adult smokers, but there is limited research on the effect of tobacco retail location and secondhand smoke (SHS) exposure. **Objectives:** Identify if location of tobacco retail outlets is associated with SHS exposure among adult residents of the Kensington neighborhood in Philadelphia. **Methods:** We surveyed one adult in 328 households in Kensington on risk factors including smoking and SHS, chronic disease outcomes, and demographics. SHS was reported as having someone who smokes inside the household. Measures of location included threshold (having at least one tobacco retailer within 250 meters, accounting for one way traffic), proximity (distance to the closest retailer, accounting for one-way traffic), and density (the count of tobacco retailers within 500 meters). We used logistic regression models to identify if measures of location predicted SHS exposure, after controlling for smoking, demographics, and other covariates. **Results:** Residents with at least one tobacco retailer within 250m threshold had higher odds of reporting SHS exposure (AOR=3.32, CI 1.18–9.38). As tobacco retailer density within 500m of resident's home increased, the odds of SHS exposure increased (AOR=1.08, CI 1.01–1.17). **Conclusions:** Measures of location significantly predicted exposure to secondhand smoke, after controlling for covariates. More research is required to identify the nature of the association between tobacco retail location and adult SHS exposure.

1:00 PM - 2:00 PM | 3188.0 | Poster

Neighborhood Characteristics and Breast Cancer Mortality in an Urban Setting: Multilevel analysis.

Hee-Soon Juon, PhD, MSN
Russell McIntire, PhD, MPH
Charnita Ziegler-Johnson PhD, MPH

Background: Although efforts have been made to decrease breast cancer disparities, recent changes in breast cancer screening recommendations can influence racial disparities of breast cancer in U.S. cities with the largest African American populations. The goal of this study was to examine the relationships between race and neighborhood characteristics, respectively, on breast cancer death among women diagnosed with breast cancer in a multiethnic, urban population. **Methods:** We obtained PA cancer registry data describing female breast cancer patients residing in Philadelphia County (2005-2014). Patients were geocoded to census tract of residence at time of diagnosis. Census tract population and socioeconomic measures were obtained from the US Census American Community Survey. Neighborhood characteristics included %Black, %unemployed, median household income, %families income below poverty, and Gini index. The percent Black was grouped by three (low, middle, and high) based on tertile and below poverty was categorized into two (<30%, ≥30). Patient characteristics included race/ethnicity (Whites, Blacks, Hispanics, and Asians) and age at diagnosis (<50, ≥50). We used multilevel statistical models using Stata. **Results:** Our sample of the 4 major race/ethnic groups included 10,801 women: Whites (47%), Blacks (46%), Hispanics (4%) and Asians (3%). In multivariate logistic analyses, living in a high percent Black and high poverty neighborhood was related to higher odds of breast cancer death. Patients who lived in neighborhoods with high percent Black residents had higher breast cancer mortality than those in low (aOR=1.26, 95% CI: 1.02-1.55). Patients who lived in neighborhoods with more than 30% of residents below poverty had higher mortality than those in neighborhoods with less than 30% below poverty (aOR=1.25, 95% CI: 1.08-1.45). At the individual level, being older and being Black was associated with higher odds of mortality. **Conclusion:** We observed that individual (age, race) and neighborhood characteristics (%poverty, %Black) related to breast cancer mortality. Future studies are needed to examine how individual socioeconomic and geographic factors interact to predict breast cancer incidence and mortality among diverse populations.

1:40 PM - 2:00 PM | 3242.0

Enhancing opportunities: Improving underrepresented minority success in medical school and changing the face of care delivery

Ida Castro, JD
Sharon Larson, MA, PhD
Maureen Murtha

Lack of racial and ethnic diversity in the physician workforce was raised as a concern in the Pennsylvania Health Disparities report. Underrepresented minorities (URM) include Hispanics and African-American providers. In 2012 Hispanics made up 16% of the US workforce but only 5% of physicians, while African Americans made up 12% of the workforce and only 7.2% of US physicians. There is evidence that white physicians are less likely to practice in underserved areas compared to URMs. Differentiated care may occur in the case of URM patients. Patients have been found to be less satisfied with their care when race/ethnicity with provider is discordant. Access to quality education to open a pathway to college and medical education needs to occur much earlier than college. In an annual survey of URM in our medical school, students identified the most challenging barriers to becoming a physician as student debt, educational costs and importantly the lack of URM role models. There is evidence that URM students may experience stereotype threats and face impostor syndrome throughout their medical education. The Center of Excellence REACH-HEI program is a longitudinal out of school time program designed to strengthen emotional quotient through access to research training, role models, mentors and experiential activities leading to enhanced success in medical school performance. REACH-HEI effectively expands the pool of qualified URM and first generation to college applicants to MD and DO programs. By attracting URM youth as early as Grade 8 and providing age appropriate programming through their admission to medical school, our REACH-HEI program intends to create a seamless diversity pipeline to medical school. Program participants learn to conduct community research and advance knowledge about medically underrepresented communities in rural/semi-urban region. Data related to medical school relevant milestones are captured at each stage of the program. Metrics assess milestones and evaluate core components of the program to ensure program improvement and ultimately enrollment of participants in medical school. Interviews and dashboard data will detail the program. Data describing success of students who began the program in high school now enrolled in medical school is presented.

1:40 PM - 2:00 PM | 3242.0

Occupational hazards in public libraries

Roxanne Dupuis, MSPH
Rachel Feuerstein-Simon, MPH, MPA
Eliza Kinsey, PhD, MPH
Abby Dolan, BAz
Carolyn Cannuscio, ScD

Background: Even in the digital era, libraries are high-traffic zones, hosting more than 1.5 billion visits across the United States annually. Library staff assist patrons with wide-ranging needs, providing research assistance, information about homeless shelters and food pantries, computer support for job applications, homework help, and more. We conducted this research to understand workplace stressors for library staff. **Methods:** We conducted statewide surveys of public libraries in Pennsylvania, Michigan, and Virginia. We also interviewed 44 librarians from 26 states during the 2018 Public Library Association conference. **Results:** In their survey responses, public library staff reported feeling unsafe at work at least "sometimes or often." This finding was echoed by interview participants, who described incidents of fighting or weapon-carrying in the library. In addition, over survey respondents reported "sometimes or often" being harassed by patrons. These findings, too, were supported by interviewees, who explained that library staff--who are predominantly female--were often targeted for in-person and telephone harassment by patrons. Library staff also experienced primary and secondary trauma as a result of their work with the public. This included assisting patrons with a medical emergency, calling 9-1-1 for a patron emergency, and having witnessed a drug overdose on-site in the prior year. **Conclusions:** In their public service roles, public library staff experience both primary and secondary trauma. Supports are needed in the nation's 9,000 public library systems in order to protect the health, safety, and wellbeing of this workforce, which has received scant attention in the public health literature.

3:00 PM – 4:00 PM | 3309.0 | Poster

Public libraries address the opioid crisis

Margaret Lowenstein, MD, MPhil
Rachel Feuerstein-Simon, MPH, MPA
Risha Sheni, BS
Roxanne Dupuis, MSPH
Eliza Kinsey, PhD, MPH
Xochitl Luna Marti, BA
Carolyn Cannuscio, ScD

Background: Public libraries have been directly impacted by the opioid crisis, including drug overdoses on-site. There is currently a manufacturer-led effort to distribute the opioid overdose antidote naloxone to every will public library in the U.S., but little is known about librarians' attitudes towards or capacity for overdose response. Our aim was to document public library staff perspectives about overdose reversal and crisis response in public libraries. **Methods:** We completed 44 in-depth interviews with public library staff attending a national meeting in March 2018. Interviews focused on how public library staff respond to patrons' health and social needs. Interviews were transcribed verbatim and analyzed with modified grounded theory. **Results:** 14% of participants reported encountering at least one drug overdose on-site, and many libraries were actively debating whether to stock naloxone. In order to better support patrons with substance use disorder (SUD), library staff wanted access to high quality health information and links to drug treatment services. They also worked to balance the needs of patrons with SUD with those of children and families who rely on library services and programs. Library staff desired greater training regarding SUD and available community supports. **Conclusions:** Public libraries are working to address on-site overdoses as well as the health and social needs of patrons with SUD and their families. A comprehensive agenda to address the opioid crisis should include strong partnerships between public libraries, public health, and healthcare institutions, with a focus on overdose prevention and improved access to evidence-based treatment services.

3:00 PM - 4:00 PM | 3299.0 | Poster

Formative Research to Inform Smoking Cessation Initiatives in an urban Cancer Center

Ann Carroll Klassen
Amy Leader, DrPH, MPH
Udara Perera, MPH, DrPH(c)

Introduction: For many cancers, tobacco use is associated with increased risk for adverse outcomes, and diagnosis and treatment can increase the salience of cessation for patients who smoke. Although evidence-based approaches to cessation services such as the Five As (Ask, Advise, Assess, Assist, and Arrange) require relatively little clinician time or effort, many cancer centers do not consistently offer cessation services to all their patients. **Methods:** In order to plan for the development of comprehensive cessation services for all patients treated at our cancer center, we conducted formative research with cancer patients who identified as current smokers, as well as clinicians involved in cancer care. In-depth interviews are being conducted with a purposive sample of 10 clinicians and 25 patients. Audio-recordings are being transcribed and analyzed thematically. **Results:** Many clinicians reported efforts to persuade patients to make quit attempts and complete referrals to cessation services, but felt they were relatively unsuccessful in facilitating cessation among their cancer patients. In contrast, patients who currently smoked reported receiving consistent counselling from their clinicians, and that these communications positively influenced their quit attempts. Many patients described current strategies to prepare for cessation, including reducing number of cigarettes consumed, as well as lifestyle modifications to support cessation. Patients also described varied preferences for pharmacotherapies, counselling modalities, and interest in exploring complementary strategies during cessation treatment, including mindfulness, exercise, and nutrition. **Conclusions:** Given that many patients reported actively planning for or attempting to reduce or quit their tobacco use, clinicians should ask about and support any efforts by patients toward cessation. Clinician education should also aim to increase understanding of the likelihood of relapse and the need for ongoing support during the cessation process.

3:40 PM - 4:00 PM | 3385.0

Does it make a difference? Exploring the value combining public health and nursing training

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Rosemary Frasso, PhD, MSc, MSc, CPH
Monica Harmon, MSN, MPH, BSN, RN
Sarah D'Ambrosia, MSN

Background: Public health nursing has declined and nursing education has placed a greater focus on advance practice degrees. Nurses with an MPH are playing an important role in public health nursing, but their experience and roles are unknown. Therefore the purpose of this qualitative study was to describe the educational and professional experiences of nurses with a Master of Public Health (MPH) and to better understand how professionals use this combination of skills in the field. **Methods:** Semi-structured telephone interviews were conducted with 11 nurses with an MPH. A code book was developed and transcripts were independently coded by two members of the research team. Qualitative analysis facilitated emergence of subsequent themes. **Results:** Four themes emerged from the analysis: (1) training decisions, (2) training experience, (3) role in the workforce, and (4) nursing and public health in practice. Reasons given for pursuing training varied greatly as did how they obtained their degrees. Participates worked in a variety of settings, including primary care, academia, and public health administration. Despite their diverse backgrounds and work experience, they all reported not only utilizing both their nursing and public health skills, but they also described true integration of these skills in the workplace. **Conclusions:** These findings suggest that nurses with an MPH value training and report being better equipped to promote health on both the individual and community level. These professionals may contribute to bridging the gap between clinical care and public health, as well as decrease the workforce burden in primary care.

8:50 AM - 9:10 AM | 4048.0

Growth patterns in the first year of life after intrauterine opioid exposure

Neera Goyal, MD, MSc
Jobayer Hossain, PhD

Background: For infants with intrauterine opioid exposure (IOE), both infant and maternal factors may impact infant feeding and weight gain patterns. Knowledge gaps persist regarding growth patterns in this population. **Objective:** To evaluate the association between infant weight gain and IOE. **Methods:** Retrospective study from 2011-2016 using PEDSnet data from infants within a pediatric primary care system spanning 35 sites across 3 states. IOE, including but not limited to diagnosis of neonatal abstinence syndrome (NAS), was ascertained by diagnosis codes. Using birth weight and outpatient visit weights, a piecewise mixed effects model with a knot at 90 days compared mean weight gain trajectories between infants with IOE and non-exposed infants through the first 3 months of life (period 1) and 3 months – 1 year of life (period 2). **Results:** Of 16,102 infants, 2.4% were categorized as IOE, 80% of whom were diagnosed with NAS. Mean birth weight was lower among infants with IOE (3013.2 vs 3366.6 grams, p<0.001). From birth to 90 days, average rate of weight gain was lower among IOE infants (30.2 vs. 34.5 grams per day, p <0.001). From 3 to 12 months, weight gain was faster among IOE infants (15.6 vs. 13.5 grams per day, p=0.03). **Conclusion:** Results suggest slower weight gain trajectories in the first few months after birth among infants with IOE, followed by more rapid weight gain in later infancy. Further research may focus on approaches to optimize feeding and weight gain for infants with IOE in a primary care setting.

9:00 AM - 10:00 AM | 4078.4 | Poster

Hacking the System: A Unique Partnership to Expedite Access of School-Aged Children to Behavioral Health Services

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Aisha Mohammed, MFT
Merlin Muhrer, LMFT

Background: Access to pediatric behavioral health services is limited, resulting in marked care gaps. Pediatrician offices, however, are readily accessible and represent an untapped resource to address this problem. We assess the first-year effectiveness of a partnership between a primary care pediatric FQHC practice (PCPP) and a school-based assistance program (SAP), designed to expedite access to behavioral health services. **Description:** Children with unmet behavioral health needs were identified by area schools and referred to SAP. Next, they were simultaneously referred to standard community-based behavioral health services and to the PCPP. Children at the PCPP received formal behavioral health diagnoses, medication management, and case management as indicated. The PCPP providers and social worker had additional training and expertise in behavioral health and were supported with telephonic access to child psychiatrists, as needed, to discuss challenging cases. **Lessons Learned:** Over a 13-month period, SAP referred 37 children to the PCPP, 20 arrived for their first appointment, 11 arrived after multiple contact attempts, and 6 never arrived for care. Median time between SAP referral and initial PCPP visit was 16 days. The 31 children encountered by the PCPP represented 100 total visits. The median age was 8 years old with a range of 5-18, 24 were male, and 23 patients were insured through Medicaid. Of the 31 patients encountered, 24 patients received behavioral health medications with 18 patients receiving medication on the first visit. Of those 24 patients, 18 received stimulants, 4 received SSRIs and 2 received antipsychotics. 30 children were recommended to follow up with community-based counseling services, 3 children were already engaged with services on first encounter, and 8 children accessed services with support from the PCPP case management services. **Recommendations/Implications:** Compared to the standard referral process for obtaining community-based behavioral health services, this collaboration markedly reduced time to evaluation and initial management of behavioral health concerns; this was particularly true for access to behavioral health medications. Our next steps are to assess the clinical, patient-level outcomes of this partnership as the cohort grows. Demonstration of improved clinical outcomes would warrant replication of this model to other primary care practices.

Tuesday, November 5, 2019

9:00 AM - 10:00 AM | 4069.2 | Poster

Cancer patients and opioid use for pain management: Is there a role for health literacy?

Amy Leader, DrPH, MPH
Alison Petok, LCSW, MPH
Lauren Waldman, BA
Brooke Worster, MD

Background: Due to the current opioid epidemic, there are concerns about prescription abuse in cancer patients, even though the use of opioid analgesics is a fundamental component of cancer pain management. Cancer patients are often unsure how to begin and end the medications, how opioids interact with their treatment plan, or how to talk with their providers about their opioid use. Some of these challenges, such as medication adherence and communication strategies, are related to health literacy. **Methods:** We explored the attitudes and perceptions of cancer patients in relation to cancer pain management, health literacy, and opioid use. Topics included awareness and understanding of opioid medication, perceptions about its use, communication with providers, and knowledge of alternative resources for pain management. Discussions were audio recorded, transcribed, and content analyzed to identify key themes and sub-themes. **Results:** Two robust focus groups elucidated common themes among a diverse sample of cancer patients. Patients both need opioids for pain management but fear their addictive properties and dislike the stigma associated with them. Patients felt that they were not adequately educated about opioids or other resources for pain management during their cancer treatment. Most patient felt comfortable discussing their opioid use with health care providers but did not always feel comfortable talking about it with friends and family. **Conclusions:** These insights from cancer patients will inform a future intervention involving both patients and providers, specifically addressing provider education and patient communication about opioids, as well as access to resources that are designed at appropriate literacy levels. It is imperative that we continue to support the responsible use of opioids among patients who need their benefit the most, even in the midst of a public health crisis.

10:30 AM - 11:30 AM | 4096.0 | Poster

Examining the Relationship between Social Cohesion and Health in Kensington

Alexander Fossi, MPH
Russell McIntire, PhD, MPH

This quantitative cross-sectional survey study was conducted in collaboration with the New Kensington Community Development Corporation (NKCDC) to improve our understanding of the role of social cohesion in the Somerset neighborhood. Its aims were to help guide future efforts to improve the health of this community by considering whether social factors might contribute to overall health. In previous studies, social cohesion has been hypothesized to be related to overall self-reported health. Stress is another factor that is often associated with health outcomes. In this study we examined the nature and strength of this relationship in a low socio-economic status population in Kensington. We used linear regression to evaluate cross-sectional survey data collected from 328 neighborhood residents. Data was collected on health information, social cohesion, demographic factors, health behaviors, and financial stability. Variables that were significantly associated with self-reported health were included in a multiple regression model to examine the relationship between social cohesion and self-reported health. Our findings were that social cohesion and overall health were related. We also found that stress was significantly associated with social cohesion as well as overall health; while the reach of this study stops short of being able to identify the causality of these relationships, organizations such as NKCDC could combine the strength of the relationships with their expertise in the relevant population to better inform their future programming. This study also revealed a number of areas that could be worthy of future study, including the importance of collective efficacy in improving population health and the effect of social cohesion on people's health over the course of a longitudinal study.

10:30 AM - 11:30 AM | 4090.0 | Poster

Maternal and infant demographic and clinical factors associated with in-hospital breastfeeding initiation among mothers in treatment for opioid use disorder

Vanessa Short, PhD, MPH
Meghan Gannon, PhD
Karen Alexander, PhD, RN
Nicole Barrck
Arianna Sanborn
Diane Abatemarco, PhD, MSW

Objective: To evaluate associations between breastfeeding initiation and maternal and infant characteristics among mothers in treatment for opioid use disorder (OUD). **Methods:** Medical record data from 106 women who were receiving comprehensive treatment for OUD (i.e., counseling, pharmacotherapy) and who delivered between 2012 and 2016 were abstracted. Maternal characteristics assessed included: breastfeeding initiation, age, race, ethnicity, parity, delivery mode, health insurance, psychosocial conditions, breastfeeding contraindications, number and type of prenatal positive urine drug screens, and postpartum depression. Infant characteristics assessed included: sex, gestational age at birth, birthweight, hospital length of stay (LOS), neonatal intensive care unit (NICU) admission and LOS, neonatal abstinence syndrome (NAS) treatment, and presence of medical conditions. Chi-square and t-tests, and logistic regression models were used to compare infant and maternal characteristics between women who initiated breastfeeding and women who did not, and to assess factors associated with breastfeeding initiation. **Results:** Women who did not breastfed were significantly more likely to have a history of anxiety (58% vs. 42%, P=.04), and an infant requiring transfer to the NICU (56% vs. 44%, P=.04) and treatment for NAS (60% vs. 39%, P=.003). Women who breastfed had a significantly shorter infant hospital LOS (P=.02) than women who did not. Infants treated for NAS were significantly less likely to be breastfed than infants not requiring treatment for NAS, even after adjusting for covariates (adjusted odds ratio 0.28, 95% CI 0.09-0.87). **Conclusion:** Efforts to increase breastfeeding initiation among women in treatment for OUD may target those with infants requiring treatment for NAS.

*Bolded names are JCPH alumni, faculty and students. Italicized names are part of the Jefferson Enterprise.

10:30 AM - 11:30 AM | 4087.0 | Poster

A comparison of management for Hepatitis B patients between the US and Chinese healthcare systems

Thomas Chen, MD(c)

Background/Significance: China is considered an endemic Hepatitis B (HBV) region, with about 100-150 million chronically infected, compared to 550,000-2 million in the US. With such high volumes of HBV cases, it is important to learn how the Chinese healthcare system is addressing this public health issue. **Objective/Purpose**: The purpose of this study is to compare how the US and Chinese healthcare systems manage HBV. **Methods:** This qualitative study was done through primary research. Key informant interviews were conducted with US hepatologists (N=10), and Chinese hepatologists (N=5), infectious disease physicians (N=5), and liver surgeons (N=2) at West China Hospital in Chengdu, China. **Results:** Antiviral therapies, entecavir and tenofovir, continue to be first-line in both countries. Clinical surveillance of HBV is also similar in both countries, where HBV patients are followed-up every 3-6 months, with routine bloodwork (i.e. CBC, LFTs, DNA viral load) and abdominal ultrasound required. However, the most stark contrast between the two countries is the physician-patient relationship. Due to differences in patient volume, general population size, and cultural differences, the Chinese healthcare system is much more focused on quantity of patients served rather than quality of services provided. **Discussion/Conclusion:** It's typical for Chinese hepatologists to see 60-80 HBV cases/day (~5-7 minutes/patient), whereas US hepatologists see 5-10 cases/day. This allows US hepatologists to take much more time on patient education, whereas the Chinese hepatologists simply do not have the bandwidth. Whether this difference in doctor-patient relationship translates to better outcomes is an open question that warrants continuation of this research.

10:30 AM - 11:30 AM | 4091.0 | Poster

Prevalence and Characterization of Adverse Childhood Experiences of Women in Substance Use Treatment

Meghan Gannon, PhD
Vanessa Short, PhD, MPH
Marianna LaNoue, PhD
Diane Abatemarco, PhD, MSW

Rates of illicit drug use among women of reproductive age remain a significant national public health problem(Martin et al., 2015, Patrick et al., 2015), as among pregnant women aged 15-44, 5.2% used illicit drugs in the past month (SAMHSA 2016). The proportion of pregnant admissions with primary opioid use disorder increased 2.5 fold in years 1996 through 2014, from 16% to 41.6% (Short et al 2018). Further complicating the maternal role is the presence of adverse childhood experiences (ACEs), which are associated with higher rates of prenatal depression, maternal childhood maltreatment (McDonnell et al 2016). The aim of this study was to: 1) determine prevalence of ACEs in a population of pregnant and parenting women in treatment for substance use disorders, 2) characterize ACEs, and 3) compare our sample to Behavioral Risk Factor Surveillance System (BRFSS) Pennsylvania data. Between 2013 and 2017, ACEs were collected from pregnant and parenting women (N=221) enrolled in treatment for opioid use disorders. Results showed mean ACE was 3.99. More than half (58%) of the women in our sample had 4 or more ACEs. BRFSS state level data revealed a mean ACE score of 1.4, with only 14% of reporting 4 or more ACEs. Frequency and severity of childhood trauma are described and our sample compared to BRFSS data. Our sample had significantly more trauma than BRFSS sample in domains such as parental divorce (67.8% vs 22.0%), emotional abuse (51.8% vs 34.0%), substance use in household (65.0% vs 26.0%), incarceration (46.5% vs 5.9%)physical abuse (44.9% vs 15.0%), sexual abuse (42.9% vs 11.4%), emotional abuse (51.8% vs 34.0%), and interpersonal violence between parents/caregivers (65.5% vs 15.8%). Disparities in ACEs between pregnant and parenting women in drug treatment vs the general population of reproductive women aged 18-44 begs the needs for future policy and intervention work.

10:30 AM - 11:30 AM | 4089.0 | Poster

Breastfeeding duration, job satisfaction, and employee perceptions of workplace lactation support among Pennsylvania employees

Colleen Payton, PhD, MPH, MCHES
Martha Romney, RN, MS, JD, MPH
Beth Olson, PhD
Diane Abatemarco, PhD, MSW
Marianna LaNoue, PhD
Amy Leader, DrPH, MPH

Background: Returning to work has been negatively associated with breastfeeding duration. Employers must provide reasonable break time and space, other than a bathroom, for milk expression under Section 4207 of the Patient Protection and Affordable Care Act. Organizational development research is needed to identify employees' perceptions of workplace lactation support to determine if there is a relationship with breastfeeding duration and job satisfaction. **Objective:** To measure breastfeeding duration, job satisfaction, and employees' perceptions of workplace lactation support among Pennsylvania employees. **Methods:** A cross-sectional survey design evaluated breastfeeding duration, job satisfaction, and employee perceptions of workplace lactation support, including organization support, manager support, coworker support, time, and physical environment. 199 employees from 3 companies in the Greater Philadelphia and Greater Pittsburgh regions completed the survey. **Results:** Among employees, 62% breastfed for more than 6 months. On a scale from 1 to 7, the mean total job satisfaction score was 5.50 (SD = 0.85). On a scale from 41 to 156, the mean total employee perception of workplace lactation support score was 117.31 (SD = 19.08). There was a significant association between perceptions of workplace lactation support and breastfeeding duration for 6 months or more, $\chi^2(5) = 10.819$, p < .001. The total workplace lactation support score was significantly and positively associated with job satisfaction, r = .321, n = 40, p = .043. **Conclusions:** Participating employees in Pennsylvania reported breastfeeding duration rates above the Healthy People 2020 goal. Job satisfaction scores were similar to published research. Employees reported high perceptions of workplace lactation support, which was independently associated with job satisfaction. Supporting employees to reach their breastfeeding goals could result in a return on investment through employee retention. Future research should continue to evaluate employers' (businesses) in efforts to measure and improve perceptions of workplace lactation support.

10:30 AM - 11:30 AM | 3081.0 | Poster

Social Capital and the Self-Efficacy of Performing Community Emergency Responder Team (CERT) Skills.

Robert Zucker, MPH
Russell McIntire, PhD, MPH

Background: Social capital has been identified as a critical part of building community health resilience for disasters. Little is known about the impact of social capital on responder self-efficacy. **Methods:** After searching for CERT organizations in all 67 counties in Pennsylvania, the 27 counties with a CERT organization and 2 regional CERT organizations were contacted to distribute an online survey during November and December 2018. The survey was distributed to members of 12 CERT organizations to collect information on respondent's demographics, time since they were trained, time living in their community, marital status, health status, and household size. Social capital was measured using the Personal Social Capital Score-16 scale. Self-efficacy of responders' skills was assessed by asking respondents to rate their confidence in 5 disaster skill areas. Each variable was tested against the self-efficacy score using an ANOVA model and included into a multivariate linear regression model if the result was significant at a level of $p<0.1$. **Results:** There was a total of 84 responses, with 58 complete responses. Only the social capital score and sex variables met the model building threshold of $p<0.1$. A linear regression model testing the association between the social capital score and self-efficacy score controlling for sex was not statistically significant ($p= 0.163$). **Conclusions**: Among the study sample, social capital was not associated with self-efficacy of CERT volunteers to perform disaster response skills. Planners looking to build social capital in communities should consider implementing community-based teams to increase social capital for other emergency preparedness efforts.

1:00 PM - 1:20 PM | 4075.0 | Poster

Population Health Intelligence: Turning data into insight and action

Karen Walsh, MS, MBA

Population health describes a current movement in health care that recognizes that much of what makes and keeps people healthy happens beyond the traditional clinical encounter. To make the move to a system that rewards outcomes rather than volume, clinicians must learn how to do more with the health data they have, as well as incorporate other disparate, but relevant, sources of information. True population health improvement will be driven by insights derived and distilled from vast amounts of heterogeneous and distinct data that are no longer limited to the physician office or hospital medical records. We have coined the term Population Health Intelligence to describe a new discipline whose role is to collect, organize, harmonize, analyze, disseminate and act upon the data available to clinicians, health system leaders, the pharmaceutical and biotechnology industry and healthcare payers. The mantra of Population Health Intelligence is turning data into insight and action. Rising healthcare costs and troubling concerns about health care quality are spurring calls for greater emphasis on value in the healthcare industry. Value is defined as costs divided by outcomes. We are only just beginning to tap the potential of the exponentially growing volume of health-related data captured in EHRs, patient portals and claims systems. Given the realities of health care in the 21st century, a shift to a value-based system is not possible without trained professionals who can collect, manage, evaluate and process data, and implement data-driven interventions.

1:00 PM - 1:20 PM | 4284.0

Shedding Light on Endometriosis: Patient Experience and Provider Awareness

Madalene Zale, MPH
Amy Leader, DrPH, MPH
Emily Lambert, MPH
Marianna LaNoue, PhD

Background: Endometriosis is a serious yet understudied medical condition impacting hundreds of millions of women around the world. **Methods:** We used a mixed methods approach to understand providers' perceptions and patients' experiences with this disease. In part one of the study, providers completed a survey to assess their understanding of the prevalence of endometriosis. A subset of providers also participated in an open-ended interview about their experiences treating patients with endometriosis. In part two, women diagnosed with endometriosis participated in interviews to understand their experiences with the disease. Means and frequencies were calculated for the survey data; interview data was analyzed separately by two coders and agreement of themes was by consensus. **Results:** Fifty-three providers completed surveys; only six of 53 providers accurately identified the prevalence of endometriosis. Four providers and 12 patients completed interviews. Emergent themes in the provider interviews included, limited training and the difficulty of making a diagnosis; patient-provider dynamic and the referral process; and the importance of multidisciplinary collaboration. Emergent themes from patients included, the psychological impact of the disease, lack of confidence and feelings of submissiveness in and by the healthcare system; the financial impact; being averse to hormonal therapies and limited treatment options; lack of awareness and self-advocacy; concerns about fertility; and quality of life. **Conclusions:** Findings of this study highlighted some issues that currently exist for patients with endometriosis and can allow clinicians to foster change within their current practice with the aim of increasing awareness, and issuing more timely and accurate diagnoses.

1:00 PM - 1:20 PM | 4216.0

Opioids in the ED: Assessing frontline staff in regard to knowledge, attitudes, and practices related to opioid use disorder

Stephen DiDonato, PhD, LPC, NCC
Madalene Zale, MPH
Kathryn Shaffer, EdD, MSN, RN, CNE
Hannah Smith, PhD
Dimitri Papanagnou, MD, MPH

Background: Emergency Departments (EDs) are at the front lines of the opioid crisis and operate at a unique position between the medical system and the communities they serve. The entire continuum of the ED staff, from physicians and nurses to social workers and case managers, engage patients with opioid use disorder (OUD) in order to address individual issues that reflect this growing public health crisis at a population health level. In Philadelphia alone in 2017 there were 1,217 overdoses, 1,074 of which involved opioids. **Objective:** To develop a training curriculum aimed at addressing the opioid epidemic for ED staff, which incorporates measures of wellness, empathy, and impact of trauma. **Methods:** To survey the full continuum of ED staff using an evaluation to determine baseline knowledge, attitudes, and practices regarding OUD in the ED. Data will be obtained through electronic surveys delivered to all ED staff via email and administered through Qualtrics. Surveys will consist of binary response, multiple choice, and Likert scale. Survey data will be analyzed for descriptive characteristics of the study cohort. This will serve as baseline pilot data for the development of a curriculum, in order to analyze the significance of the implementation of the focused curriculum developed in this study. **Results:** While we don't have preliminary results at the this time (February 2019), the baseline evaluations have been deployed, and we expect the results of which to have wide-reaching implications for EDs to improve the level of care provided to those patients with OUD. Ongoing evaluation is necessary. **Conclusions:** A trauma-informed department not only trains providers in clinical skills, but ensures that the department is supportive of a culture of health among staff. In order to optimize delivery of care, healthcare organizations must ensure that their staff are equipped with the knowledge and skills to care for vulnerable and at-risk populations including those patients with OUD.

1:00 PM - 2:00 PM | 4199.0 | Poster

Distracted driving text ban law impacts in Ohio and Pennsylvania

Jaime Shuster, PHD, MA, MPH, BA
Billy Oglesby, PhD, MSPH, MBA

Distracted driving accidents average over 400,000 injuries and over 3,000 fatalities annually in the United States. Over 400 fatalities are directly associated with cell phone use nationwide annually and increasing. Ohio and Pennsylvania each have their share of these unintentional and preventable statistics, however, each state has differing distracted driving laws. This study was conducted to see which law type, primary or secondary enforcement texting while driving bans, yielded injury and fatality improvements from 2010 to 2016 using the Fatality Analysis Reporting System (FARS) from pre-law enactment to post-law implementation. Using an interrupted time series regression, this time period of injuries and fatalities was analyzed. Ohio (secondary enforcement texting while driving law only) had an overall 1.38% increase of fatalities and injuries from 2010 to 2016. Primary enforcement texting while driving law in Pennsylvania, during the same time period, yielded a decrease of 4.35%. Both states have laws that are difficult to enforce consistently due to specific language within each. Other states have seen more success with combination laws of texting while driving and handheld bans in order to decrease overall injuries and fatalities. The combination laws with electronic device usage are more enforceable since they cover all modes of electronic use while driving with primary enforcement and leave little wiggle room for loose interpretation. In addition, in order for injury and fatality reductions to be remain steady, the laws must be consistently and effectively upheld by all law enforcement without vacillation.

1:00 PM - 2:00 PM | 4212.0 | Poster

Reaching Medicaid Patients Where They Are: A Pennsylvania Pharmacy Network Case Study of an Innovative Relationship with a Medicaid Managed Care Organization

Nicholas Leon, PharmD, BCPS, BCACP, FCPP
Stephanie McGrath
PharmD, Kim Coley, PharmD
David Pope, PharmD
Elizabeth Grassmyer
Melissa McGivney, PharmD, FCCP, FAPhA
Joni Carroll, PharmD, BCACP

Community pharmacy enhanced services networks (or CPESNs) are collections of community pharmacies have demonstrated commitment to providing high quality and high integrity patient-centered enhanced services. During the last 3 months of 2017, the Pennsylvania Pharmacists Care Network (one such CPESN) implemented and executed a contract with a managed care organization (MCO) for the provision of comprehensive medication management (CMM) to Medicaid patients who have one or more chronic medications. During that time, over 900 patients received care at over 50 pharmacies. Evaluation of the 2017 experience led the same MCO to engage in a 6-month long contract in 2018 where over 1600 patients received care and over 2600 medication-related problems were identified. Experience from these contracts has led the MCO to engage in an 11-month contract starting in February 2019. Documentation of services is standardized across a single platform allowing for billing of services and patient outcome analyses. During each contract, semi-structured, bi-weekly key informant interviews were conducted with each pharmacy to learn from the successes and challenges of implementation. We aim to share the implementation of successive payer contracts to provide CMM to Medicaid patients through a state-wide pharmacy network in Pennsylvania and explore the impact on the population served. Sharing these learnings may enable future innovative collaboration between different types of health care payers, state departments of health, and networks of community pharmacies to enhance population health efforts by accessing and engaging patients through the pharmacies they frequent in a way that promotes quality, accountability, access, and outcomes.

1:00 PM - 2:00 PM | 4199.0 | Poster

Medical respite care services for homeless patients discharged from an urban tertiary care hospital in Pennsylvania: A needs assessment

Taylor Treacy
Lara Weinstein, MD, MPH, DrPH

Introduction: Medical respite programs have been proposed as a temporary solution to address the increased hospital readmission rates and lack of appropriate discharge options that exist for homeless patients. **Objective:** This study examines the 90-day readmission rate and discharge locations of homeless patients in a large urban tertiary care center. **Methods:** A retrospective chart review of homeless patients discharged from an urban tertiary care hospital in Pennsylvania, over a 1-year period, was conducted. Homelessness was identified as any patient with a residency address of a homeless shelter, an office address used as a proxy for homelessness, or no address. The primary outcome was 90-day hospital readmission rate. The secondary outcome was discharge location. Data regarding patient age and insurance status were also collected. Descriptive statistics were performed. **Results:** Inpatient data (n=202) was examined. The mean age was 46 years and 58.4% of patients had Medicaid. 70.8% of patients were discharged to home/residence and 15.8% left against medical advice (AMA). 20.8% of patients experienced $\geq$1 hospital readmission in 90-days. **Conclusion:** Gaps exist in the discharge disposition options in EPIC (an electronic medical record system). It remains unclear what "discharge to home/residence" means for homeless patients, but likely does not indicate actual discharge to a permanent residence. Importantly, homeless patients have much higher rate of AMA discharge (15.8%) compared to the general hospital population (1.5%). Future efforts should focus on integrating medical respite care into discharge planning programs, and educating healthcare providers on discharge options available for homeless patients.

1:00 PM - 2:00 PM | 4199.0 | Poster

Addressing stalking in the United States: A policy analysis

Courtney Riseborough, MPH
Martha Romney, JD, MPH, RN, BSN

Background: Research has found that millions of people in the United States (U.S.) have experienced stalking. Stalking causes poor mental health, chronic health conditions, injury, disability or death. Stalking is difficult to identify and prevent due to complex and unpredictable behaviors, and the variance in state criminal and civil stalking laws. The first Model Stalking Code was drafted in 1993 and revised in 2007 after increased knowledge of effectiveness of anti-stalking legislation, and quantifiable national data on the prevalence of stalking. Recent data was examined to determine if the current Model code should be amended to reflect current issues of stalking. **Methods:** A qualitative policy analysis was conducted to provide evidence-based recommendations for updating the Model Stalking Code Revisited: Responding to the New Realities of Stalking. A comprehensive scientific literature review and federal and state anti-stalking legislative assessment were conducted. Relevant data were transcribed and entered into an Excel database, facilitating systematic comparisons and analyses to identify trends and differences in state laws. **Results:** State anti-stalking statutes vary greatly in the categorization of the crime of stalking and severity of punishments. Statutes are difficult to interpret, and few states address the mental health needs of stalkers. **Conclusions:** The analyses revealed gaps in the Model Code. Recommendations include adding language identifying and describing a mandatory psychiatric evaluation(s) or counseling for individuals convicted of stalking in the Punishment Section in the Code. The second recommendation is to reorganize stalking laws into separate subparts to facilitate a greater understanding of the laws.

1:00 PM - 2:00 PM | 4194.0 | Poster

Where There's Smoke, There's Fire: What Current and Future Providers Do and Do Not Know About Electronic Cigarettes

Josephine Hwang, MD, MPH
Rosemary Frasso, PhD, MSc, MSc, CPH

Health care providers play a pivotal role as educators on health-related matters ranging from vaccination to tobacco use prevention. With the rising popularity of electronic cigarettes (e-cigarettes), providers face a new challenge. To date, studies have identified a general lack of knowledge among providers regarding e-cigarettes and discomfort with counseling patients on e-cigarette use. This study aims to systematically explore the perspectives of different health care providers on e-cigarettes and their health implications. With a growing availability of research on the health consequences of e-cigarette use, our study also aims to assess the familiarity of our participants with this literature. From July to October 2018, a sample of attendings (n=15), residents (n=15), medical students (n=33), and nursing students (n=28) from Thomas Jefferson University participated in a freelisting interview and survey. Our study found that perceptions of e-cigarettes vary across different participant groups, as evidenced by the range of responses when asked to think about e-cigarettes and their health implications. We identified gaps in knowledge among students regarding FDA regulation of e-cigarettes and found that attending physicians are less aware than junior trainees of the prevalence of e-cigarette use. Familiarity with evidence-based health consequences of e-cigarette use was variable and low across all groups. Finally, participants most commonly reported learning about e-cigarettes from news outlets and social media rather than professional platforms. This study highlights the need for curricular development in nursing and medical schools, residency training, and continuing medical education regarding e-cigarette use and their impact on human health.

*Bolded names are JCPH alumni, faculty and students. Italicized names are part of the Jefferson Enterprise.

1:00 PM - 2:00 PM | 4214.1 | Poster

Running Out: Food Insecurity in the LGBT Older Adult Population

Dominique Viola, MPH
Ambuj Suri, MPH
Rosemary Frasso, PhD

While food insecurity has been shown to affect Americans across the lifespan, older adults, defined as individuals over 65, have one of the highest subpopulation rates. Approximately 10% senior only households experience food insecurity nationally (Rabbitt, et al., 2017; Chung et al., 2012). A smaller, less researched faction of the older adult population is the lesbian, gay, bisexual and transgender (LGBT) older adult community. Research has shown that LGBT seniors are significantly poorer than their heterosexual counterparts (Emlet, 2016). LGBT older Americans experience higher rates of isolation and lower rates of familial and social support as LGBT seniors are three times more likely to enter older adulthood without having children nor a spouse (Goldberg & Mawn, 2014). Research on general food insecurity has uncovered that low income and reduced social support have been defining indicators for experiencing food insecurity (Rabbitt, et al., 2017) However, less is known regarding food access challenges faced by older adults who identify as LGBT. This qualitative study explores the experiences of ten LGBT older adult community members who self-identify as food insecure. All interviews were recorded, transcribed verbatim, and analyzed using common coding techniques. Results highlighted a variety of barriers that limited access and multiple enabling factors. A key finding is the need for food programs that account for the needs of the older adult population, particularly food access for individuals with mobility issues. The results can inform program implementation and evaluation to make food access programs equally as effective for older program participants.

1:00 PM - 2:00 PM | 4211.0 | Poster

Lung Cancer Screening among those Referred to a Screening Program in Philadelphia: Neighborhood-level Correlations

Russell McIntire, PhD, MPH
Denine Crittendon, PhD(c), MPH
Julie Barta, MD
Hee-Soon Juon, PhD, MSN

Background: Previous studies identified important patient-level factors associated with receiving low-dose computerized tomography (LDCT) among those referred to a lung cancer screening program in Philadelphia. However, there is little knowledge about the influence of neighborhood-level factors on LDCT screening. In this study, we identify correlations between the proportions receiving screening in the Jefferson Lung Cancer Screening Program (JLCSP) by Philadelphia Planning District (PPD) and aggregate demographic, risk factor, and health outcome neighborhood measures. **Methods:** We geocoded eligible patients referred to the JLCSP (N=419) by PPD, and calculated the proportions receiving screening by the 18 PPDs. We linked this data with 22 aggregate variables describing demographic, risk factor, and health outcomes by PPD accessed from the 2014 Philadelphia Department of Public Health's Community Health Assessment. We used simple logistic regression to identify correlations between proportions receiving screening and aggregate variables by PPD. **Results:** We identified statistically significant relationships between lung cancer screening proportion by PPD and four aggregate variables: adults forgoing care due to cost; unemployment; adults without medical insurance; and diabetes prevalence (β= -1.073; β= -1.611; β= -.957; β= -1.517, respectively). **Conclusion:** We found inverse relationships between the proportions receiving screening by PPD and three aggregate socio-economic variables (adults forgoing medical care due to cost, unemployment, and adults without medical insurance) and one outcome variable (diabetes prevalence). Future studies should explore whether and how these aggregate measures at the neighborhood level may influence patient's receipt of screening services in order to maximize the impact of lung cancer screening programs.

2:00 PM - 2:20 PM | 4236.0

Reducing Barriers to Diabetes Prevention and Management

Neva White, DNP, CRNP, CDE
Susana Suarez, BS
Rickie Brawer, PhD, MPH, MCHES

According to the Centers for Disease Control (CDC), more than 100 million US adults are living with diabetes or prediabetes. In response to the burden of diabetes in our community, we provide two community based diabetes prevention and management programs. Lose Weight and Prevent Diabetes, a one year program, based on the CDC National Diabetes Prevent Program and Learning to Management and Live with Diabetes an online comprehensive diabetes self-management education program, using zoom video conferencing. Community organizations have an important role in reaching vulnerable people living with diabetes. Based on assessment findings from A1C, BMI and diabetes risk test screening we collaborated with the Southeast Asian Mutual Assistance Coalition (SEAMACC), and Bhutanese Association of Philadelphia, and Delaware Valley Community Health Maria de los Santos Health Center, to conduct diabetes prevention programs in Laotian, Bhutanese, Vietnamese, and Spanish. Methods used to reduce barriers included: training bilingual lifestyle coaches, curriculum CDC Prevent T2 curriculum translated into Lao, Nepali, and Vietnamese, diabetes education offered online using live zoom video conferencing, and modifying sessions to include F41culturally responsive teaching strategies. Preliminary six month, data for the diabetes prevention program suggests that 21 % of participants have achieved weight loss and 81% have increased their weekly physical activity. Outcomes from the online diabetes classes suggests increased retention and improved A1C levels. The chronic nature of diabetes requires lifelong behavior change to support prevention and management. Culture shapes behavior change. Implementing culturally sensitive diabetes prevention strategies requires attention to language, literacy, values, beliefs, and customs. In order for community based diabetes programs to affect a population, classes must be offered where it is accessible and familiar to the population served. Given increased demands on personal time, travel concerns, child care issues, inclement weather, and a host of other barriers, online learning opportunities provide increased access to care.

Tuesday, November 5, 2019

2:00 PM - 2:20 PM | 4247.0

Adolescent food insecurity, obesity and body composition

Eliza Kinsey, PhD, MPH
Wei Shen, MD
Dympna Gallagher, EdD
Sharon Oberfield, MD
Lori Hoepner, DrPH
Frederica Perera, PhD
Julie Herbstman, PhD
Andrew Rundle, DrPH

Introduction: Adolescent obesity is a critical public health emergency, with an estimated 21% of U.S. adolescents classified as obese (at or above sex-specific 95th percentile on CDC BMI-for-age growth charts). Food insecurity has been associated with obesity among adult women, while evidence of this association among adult men and youth has been mixed. Most studies evaluating this relationship in youth use surrogate adiposity measures, including BMI and waist circumference, to determine obesity status. These measures are less reliable among youth and do not provide a valid assessment of abdominal visceral adipose tissue (VAT), elevated levels of which can predict obesity-related health outcomes in both obese and non-obese persons. Body composition better characterizes the obesity phenotype, with MRI being the gold-standard for measurement of adipose tissue distribution. **Methods:** In a longitudinal birth cohort study, we use multivariable linear regression to predict adolescent adiposity by concurrent food insecurity status. Visceral and subcutaneous adipose tissue mass will be measured in 300 adolescents in the sample (ages 15-18) by MRI and waist circumference; and total body adiposity by fat mass index from bio-impedance and BMI z-score. **Results:** Preliminary results from a partial sample (n=111) show that 27.9% are food insecure, 33.3% are obese, and BMI z-score mean=0.95. Results for associations between food insecurity and adiposity are forthcoming. **Discussion:** Adolescent obesity and elevated VAT have significant implications for obesity-related disease outcomes, both during adolescence and adulthood. This study addresses a critical gap towards understanding the linkages between food insecurity and weight-related health risks among adolescents.

3:00 PM - 3:15 PM | 4366.0

Addressing lung cancer screening disparities in vulnerable populations through education: A needs assessment among patients and healthcare providers

Kristine Pham, MPH,
Rickie Brawer, PhD, MPH, MCHES
Martha Romney, BSN, RN, MS, JD, MPH
Melissa Chai

Background: Low-dose CT screening for lung cancer was approved for coverage by the Centers for Medicare & Medicaid Services in 2015, but screening rates have remained low (~5%). In 2018, a large urban health system formed a learning community and conducted a needs assessment to address barriers to screening in vulnerable patient populations. Findings will be used to develop tailored educational materials and strategies to promote lung cancer screening. **Methods:** Interviews and surveys with primary care providers and key informants from the Asian, African American, LGBTQ+ and Veteran communities were conducted to gain insight on knowledge, attitudes, beliefs and barriers to lung cancer screening. Focus groups were held with screened and non-screened smokers to better understand obstacles and motivating factors. These assessment tools were created with guidance from a Patient and Stakeholder Advisory Committee comprised of health system patients, providers, screening staff and community members. **Results:** Significant barriers for patients included perceived insurance coverage/cost, work and family obligations/burden, fatalism, stigma and language. Providers lacked awareness of how the lung cancer screening program functioned and noted improvement needed in follow-up communication with referring providers about patient results. Preferences for community education included culturally-relevant materials, use of social media and in-person classes conducted by healthcare providers or faith-based leaders in appropriate languages. For providers, training should be integrated into pre-existing activities such as faculty meetings and grand rounds. **Conclusions:** Outcomes of a lung cancer screening needs assessment resulted in the development of culturally and linguistically-informed educational strategies to help address barriers to screening and better inform both healthcare providers and at-risk patients.

3:01 PM - 3:08 PM

Shining a spotlight on Pennsylvania's public health nurses

Katherine Kinsey, PhD, RN, FAAN
Frank DuPont
Shukriyyah Mitchell, BSN, RN
Erin Graham, BSN, RN, IBCLC
Maria Mazzocchi, MSN, RN, IBCLC
Elizabeth Tooher, MPH, RN
Monica Harmon, MSN, MPH, RN
Ann Ritter, JD, MPH

We don't often hear about the work of public health nurses, but they have a big impact on the health of our communities. Shining a Spotlight on Pennsylvania's Public Health Nurses shares the work of nurses working in community-based settings in Pennsylvania, including home visiting nurses at the Philadelphia Nurse-Family Partnership and Mabel Morris Family Home Visit Program. Nurses working in community health centers and other settings are also highlighted. The film features nurses who have discovered that their calling in life is to work with vulnerable, high-risk populations and reduce health disparities. It has been shared in classrooms throughout Pennsylvania, exposing students in nursing and pre-nursing courses to public health career options as well as the diversity of the nursing workforce. This video was made possible thanks to The Promise of Nursing for Pennsylvania Small Grant Program administered by the Foundation of the National Student Nurses' Association and the Pennsylvania Action Coalition. Special thanks to The Family Practice & Counseling Network, Face to Face, Reaching Healthy, Parents As Teachers, the Philadelphia Nurse-Family Partnership, Mabel Morris Family Home Visit Program, and the Public Health Management Corporation.

*Bolded names are JCPH alumni, faculty and students. Italicized names are part of the Jefferson Enterprise.

3:20 PM - 3:40 PM | 4325.0

Promoting Social Inclusion Through an Arts Based Curriculum: Participant Reflections of a Mural Arts Initiative

Talia Charidah, MPH
Melissa Fogg, MSW
Colin Plover, PhD, MSN/MPH, MSN, RN
Rosemary Frasso, PhD, MSc, MSc, CPH

A growing number of immigrants and refugees from across the world have resettled in Northeast (NE) Philadelphia, where nearly half of its residents over the age of five speak a language other than English. According to the PA Refugee Resettlement Program, over 2,000 refugees from Middle Eastern countries, including Iraq and Syria, have resettled in Philadelphia since 2003. Social service agencies and refugee resettlement programs are located predominantly in the center of the city, and refugees living in NE travel long distances to participate in ESL classes and other types of programming. Recognizing this need, the Porchlight Department of Mural Arts (MA) Philadelphia, which focuses on non-clinical approaches to addressing trauma and behavioral health, has established a yearlong program offering free art workshops, proximal to the Arabic speaking community. These workshops promote social inclusion through an arts-based curriculum, ultimately increasing social connections and social support, which are associated with positive health outcomes. Through collaboration with MA, this project aims to describe a unique ongoing intervention and share participant perceptions and reflections in order to inform future programming. Exit interviews were conducted post workshop to gather participant reflections towards each session. Participants noted that after having participated in the workshops, they were able to better express themselves through the art activities and enjoyed being able to change their daily routine, while also interacting with members of the community. This intervention provides a cultural space that fosters creative expression, which in turn allows participants to make important connections in their new city.

4:00 PM - 4:20 PM | 4359.0

Hospital Readmissions in Urban versus Rural Hospitals from 2011-2016

Lauren Birmingham, PhD, MA
Joseph Smith, PhD, MPH
Paul Sebastian, MPH
Mutlaq Albugmi, MPH
Billy Oglesby, PhD, MSPH, MBA

Background: The Hospital Readmission Reduction Program (HRRP) has been shown to be associated with reductions in 30-day hospital readmissions. Cross-sectional studies have demonstrated that differences in readmission rates between urban and rural hospitals did not differ after implementation of the HRRP. Limited evidence exists to demonstrate how urban and rural hospital readmission rates changed overtime. **Methods:** Hospital wide 30-day readmission rate data from the Centers for Medicare and Medicaid Services were used for acute care hospitals. The pre-HRRP period was defined as 7/1/11-6/30/12 and the post-HRRP period was the mean readmission rate from 7/1/12-6/30/16. Bivariate analysis and repeated measures linear regression analyses with a difference-in-differences term were used to assess changes in all-cause hospital wide 30-day readmission rates before and after the HRRP in urban and rural hospitals. **Results:** 4,753 hospitals met inclusion criteria. Bivariate analysis demonstrates that the average decrease in readmission rates following implementation of the HRRP was 0.54 and 0.60 percentage points for urban (n=3640) and rural (n=1113) hospitals, respectively. A significant difference was detected in the change in readmission rates from the pre-HRRP period to the post-HRRP period between urban and rural acute care hospitals in the regression analysis (-0.069, p=0.0067). **Conclusion:** Rural hospitals achieved greater decreases in hospital-wide readmission rates over the study period. Data suggest that rural hospitals had more opportunity for improvement in the pre-HRRP period and have reduced readmission rates to be consistent with urban hospitals, suggesting potential regression to the mean. Further analysis with greater control for confounders is needed.

5:00 PM - 6:30 PM | 4389.0

Using PhotoVoice to assess health of youth living in Eastern North Philadelphia's Latino Communities

Caleb Dafilou, MPH
Rickie Brawer, PhD, MPH, MCHES

Eastern North Philadelphia is home to both the highest density Latino population in Philadelphia and some of the poorest health measures in the city. In the target area, 17.5% of people have diabetes, 33.6% have asthma, and 36.9% have a diagnosed mental health condition. Beyond this, high rates of poverty and educational attainment, with 46.8% living below the poverty line and only 61.3% having a high school diploma or GED, put people in these communities at higher risk for poor health outcomes. Understanding how youth perceive the impact of their social and built environment on their health brings attention to the issues that the community needs addressed. In order to determine these needs, three PhotoVoice projects were conducted with high school aged youth across five zip codes in Spring 2019. Each group was trained in photography and asked to take pictures in their community that represent what helps or prevents them from being healthy. Themes were discussed individually. Individual interviews were recorded, transcribed and coded by multiple researchers to ensure inter-rater reliability. Participants conducted thematic analysis and prioritized the most urgent health needs first within each group, and then collectively between all three groups. The aim of the project is to identify the highest priority needs in the community, empower youth to take action and make changes within their community, and to utilize photography as a tool for community advocacy and elevating the voices of the youth living there.

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8:30 AM - 10:00 AM | 5050.0

The Opioid Epidemic: A Call for Cross-Collaboration & Understanding (Organised by PHN, MH, ATOD)

Moderated by
Kathryn Shaffer, EdD, MSN, RN, CNE

Interprofessional and collaborative interventions are vital to address the opioid crisis. In this session, three APHA sections will elaborate collaborative research and interventions aimed at addressing aspects of the crisis in communities.

8:45 AM - 9:00 AM | 5045.0

Clinician Perspectives on Shared Decision Making (SDM) about Lung Cancer Screening (LCS)

Pamela Myers, MPH
Mohammad Abubaker-Sharif, BS
Emily Lambert, MPH
Christine Shusted, MPH
Ronald E. Myers, PhD

Background/Objective: In 2015, the Centers for Medicare and Medicaid Services announced coverage for annual LCS with low dose computed tomography (LDCT) for patients who satisfy defined eligibility criteria and go through a provider-directed SDM session. This study was intended to gain insights into provider perceptions about SDM for LCS. **Methods:** In Fall 2018, semi-structured interviews were conducted with internal medicine physicians in a large urban medical center. An interview guide was used to elicit physician views about decision aids, including interactive patient decision support tools, to facilitate SDM. All interviews were audio-recorded and transcribed for analysis. Transcripts were coded using direct content analysis in NVivo 12. **Results:** Nine physicians completed an interview. Respondents reported that when they discuss LCS with screening-eligible patients, they rarely use decision aids. While physicians saw the potential value of decision aids, they expressed concern that using such tools, including decision support interventions, may be challenging for patients with low health literacy and may be difficult to integrate into the practice workflow. Respondents were receptive, however, to exploring alternative strategies for doing SDM related to LCS. **Conclusions:** Findings from this pilot study indicate that most respondents did not use decision aids or interactive tools when discussing LCS with patients. LCS programs have an opportunity to help primary care physicians facilitate high quality SDM for patients who are eligible for screening. More research is needed to determine how to achieve this goal.

8:50 AM - 9:10 AM | 5050.0

Are Medicaid Prescriber Reports Effective in Reducing Inappropriate Benzodiazepine Prescribing?

Joseph Smith, PhD, MPH
Oluwatoyin Fadeyibi, PharmD, MPH
Ryan Connolly, MD, MS
Molly Candon, PhD
Kelly Boettcher, MSW
Suet Lim, PhD
David S. Mandell, Sc.D.
Geoffrey Neimark, MD

The purpose of this study is to test the effectiveness of a prescriber report in reducing benzodiazepine prescriptions among patients with concomitantly prescribed opioids, or who are receiving opioid agonists used in medication assisted treatment, or who have a recent history of substance use addictive disorder treatment. This stepped-wedge randomized trial was conducted in partnership with a large county-managed Medicaid behavioral healthcare organization as part of a quality improvement project. The intervention comprised a prescriber report that summarized prescribing trends over the course of 12 months (with a six month data lag). The sample included all psychiatrists contracted by Medicaid in Philadelphia during 2017 through 2019. Only prescribers with five or more adult patients (18-64y) receiving a benzodiazepine were included (n=214). A psychiatrist's prescribing was compared with previously disseminated treatment guidelines. The report card presented three measures of inappropriate prescribing as determined by clinical leadership: 1) proportion of a psychiatrist's Medicaid patients filling a benzodiazepine prescription with concomitant opioid prescription(s); 2) proportion of a psychiatrist's Medicaid patients filling a benzodiazepine prescription with concomitant methadone treatment; and 3) proportion of a psychiatrist's Medicaid patients filling a benzodiazepine prescription with a documented treatment for an addictive disorder in previous two years. Psychiatrists were randomized to one of two groups. The report card was mailed to the first group in February 2019. The first and second group will receive the report card in May 2019. The outcome of interest is the change in the proportion of patients in each of the three measures for one year after receipt of the report cards, as measured through Medicaid pharmacy claims. Data analysis will begin in June 2019 to allow for 90 days for behavioral change to manifest in pharmacy claims. Claims will be compared for the first and second intervention group and a differences-in-differences with other specialties. Prescriber report cards have been used to deter inappropriate prescribing of antibiotics, antipsychotics, and opioids with mixed success. This study aims to address the increase in inappropriate benzodiazepine prescribing, by taking advantage of the unique Medicaid arrangement in one of the largest cities in the country.

10:30 AM - 10:45 AM | 5096.0

Social media and miscarriage: A qualitative study of posts using #ihadamiscarriage on Instagram

Amy Henderson Riley, DrPH, MCHES
Rebecca Mercier, MD
Katherine Senter, BA
Rachel Webster, MD

Background: Approximately 18% of all pregnancies result in miscarriage (before week 20). Much of the literature on miscarriage focuses on diagnosis and medical management, but for many women the experience is emotional, isolating, and stigmatizing. In 2014, Jessica Zucker, PhD, a clinical psychologist specializing in women's reproductive mental health, started the #ihadamiscarriage campaign to encourage people to share their experiences of miscarriage on social media. **Methods:** Drawing from the growing literature on qualitative analysis of social media, and pulling from Diffusion of Innovations and Uses and Gratifications theories, this study assessed how social media users who used the hashtag #ihadamiscarriage depicted experiences of miscarriage on Instagram, a popular social media site that allows users to publish both photos and text. Data were extracted from posts with the hashtag and included using the following criteria: post was publicly available, written in English, described an experience of miscarriage, and was not an advertisement. Qualitative methods guided by directed content analysis were used by the four-member multidisciplinary team to code and analyze the sample. **Results:** Preliminary themes included clinical encounters, sorrow, remembrance, faith, humor, and identification with celebrities who have shared experiences of miscarriage. **Conclusion:** Analysis is in progress will be complete in spring 2019. As the only known study of social media and miscarriage, this presentation will include both themes and accompanying images to enable public health practitioners, researchers, and providers to better support women experiencing miscarriage and help to reduce shame, blame, guilt, and stigma around this public health topic.

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11:05 AM - 11:07 AM

Success of emergency department HIV screening program: Public health in acute care settings

Austin Smock
Travis Huhn
Viraj Patwardhan
Priya Mammen, MD, MPH

The Emergency Opt Out program reflects a unique approach to public health in the acute care space. As undiagnosed HIV infection poses a fundamental barrier in decreasing the spread of HIV and working towards an AIDS free generation, this program introduced opt out screening in the Emergency Department. By capitalizing on the role and reach of the Emergency Department in serving patients who may be missed in other aspects of the health system, the Emergency Opt Out Program successfully identified previously undiagnosed infections and facilitated linkage to ongoing specialty care and resources. This video serves to highlight the goals and outputs of the program to inform and engage stakeholders and illustrate innovative approaches to public health issues.

11:30 AM - 11:50 AM | 5108.0

Developing a Health System Learning Community Strategy for Lung Cancer Screening Outreach

Ronald E. Myers, PhD
Melissa DiCarlo, MPH, MS
Emily Lambert, MPH
Christine Shusted, MPH
Rickie Brawer, PhD MPH MCHES
Teresa Giamboy, DNP, CRNP, MTTS
Gregory Garber, MSW, LCSW
Charnita Zeigler-Johnson, PhD, MPH
Hee-Soon Juon, PhD, MSN
Gregory Kane, MD, FACP

Background: The Centers for Medicare & Medicaid Services approved coverage of low-dose CT screening for lung cancer in 2015, but screening rates have remained low. In 2018, a large urban health system formed a learning community to increase screening in populations that have high smoking rates. **Methods:** The 90-member Lung Cancer Learning Community is comprised of a Coordinating Team (health system personnel), Steering Committee (health system administrators, payer representatives, and community organization leaders), and Patient and Stakeholder Advisory Committee (health system patients, providers, screening program staff). Learning community members assessed lung cancer screening in the health system, identified screening barriers and facilitators, and developed an outreach strategy to optimize population lung cancer screening rates. **Results:** We determined that lung cancer screening rates are low (< 5%) among white and nonwhite health system primary care patients. In addition, the learning community developed low-literacy multi-lingual patient lung cancer screening print education materials, revised an existing lung cancer screening decision aid, and adapted an online software application for use in outreach contacts. The learning community also identified 3,000 primary care patients who are eligible for lung cancer screening. The health system will implement the tools described here and will compare the impact of centralized outreach contacts to usual care on lung cancer screening. **Conclusions:** The learning community has developed a combined intervention strategy that targets primary care patients eligible for lung cancer. Findings from the planned intervention project will help to shape health system efforts to increase lung cancer screening rates.

12:30 PM - 12:50 PM | 5148.0

An Environmental Scan of Human Papillomavirus Vaccination in the Greater Philadelphia Area

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Background: The human papillomavirus (HPV) vaccine protects males and females against HPV related cancers. Rates of vaccination in Philadelphia are among the highest in the country yet barriers to vaccination continue to exist for some populations. **Objective:** Conduct an environmental scan of barriers to HPV vaccination, with three overarching aims: [1] a community scan of barriers encountered by parents and stakeholders in low resource neighborhoods; [2] a media scan to understand how the HPV vaccine is discussed on social media; and [3] an immunization registry scan to uncover novel predictors of vaccination. **Methods:** The community scan included 6 focus groups with parents and 15 key informant interviews to discuss ways to overcome barriers. The media scan included Twitter and Instagram analysis of discourse and content about the vaccine. The registry scan incorporated known predictors of vaccination such as gender, age, and insurance status with novel predictors such as social capital and healthy behaviors. **Results:** Across all three scans, we found a lack of awareness of HPV and the vaccine in some communities. Stakeholders desire credible information to promote the vaccine to parents and children. Most adults use or view social media, where they may be hearing mixed messages and misinformation about the HPV vaccine. New predictors of vaccination may help identify those who have not been vaccinated. **Conclusion:** An environmental scan can be used to assess a 360-degree view of barriers to HPV vaccination to create a comprehensive picture of the problem and a plan for action in the future.

12:50 PM - 1:10 PM | 5129.0

Measuring Burden of Breast Cancer among Neighborhoods in Philadelphia

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Background: This study presents a novel method for determining burden of breast cancer among urban neighborhoods. **Methods**: We geocoded female breast cancer patient data (n=10,801) from the Pennsylvania cancer registry from 2005-2014 by address and aggregated cases to identify breast cancer outcomes by Philadelphia Census Tract (CT). For each CT, we calculated age-standardized incidence ratios (SIRs) and mortality ratios (SMRs). For each patient, we combined breast cancer stage and grade into an aggressiveness variable, and aggregated these outcomes to create a mean aggressiveness variable by CT. For CTs containing 300 or more women age 20+ (n = 372), we created a breast cancer composite variable by summing the SMR, SIR, and mean aggressiveness variables, each centered and scaled by their respective means and standard deviations. We mapped CTs with the highest 5% (n = 18) composite scores to identify the locations of neighborhoods with the greatest burden of breast cancer. **Results:** The mean breast cancer composite score among the 18 highest CTs in Philadelphia was 4.42. The CTs with the highest breast cancer composite score were geographically disparate; 4 were in Center City, 3 were in University/Southwest, and 2 were in South Philadelphia, and Lower Far Northeast, respectively. Further exploration of geographic, demographic, and risk-factor commonalities of these neighborhood is necessary. **Conclusion:** Our method of ranking of CTs using a breast cancer composite score determined by combining SIR, SMR, and mean aggressiveness could be utilized by public health decision-makers when tasked to select a limited number of neighborhoods in which to focus prevention services.

*Bolded names are JCPH alumni, faculty and students. Italicized names are part of the Jefferson Enterprise.

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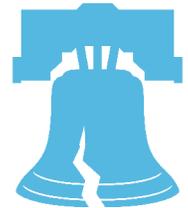
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