Student Public Health Poster Session & Recognition Night

Wednesday, May 2, 2018

The College of Physicians of Philadelphia
19 South 22nd Street
Philadelphia, PA 19103
Student Public Health Poster Session & Recognition Night

Wednesday, May 2, 2018

Agenda

4 – 5pm – Poster Set-up
   (Mitchell Hall)

5 – 7:00pm – Judging, Reception, and Awards Ceremony
   (Mitchell Hall and Ashhurst Hall)

The Section on Public Health and Preventative Medicine will recognize

Elaine Tran, MPH Candidate, University of Pennsylvania,
Student Public Health Recognition Award
RACIAL/ETHNIC DISPARITIES IN HEPATOCYTOBLAR CARCINOMA STAGE AT DIAGNOSIS & INITIAL TREATMENT AMONG ASIAN AMERICAN PATIENTS AGED 18-64, DIAGNOSED IN CALIFORNIA FROM 2007-2014

Author(s) and affiliation: Saema Adeeb, MPH(c), Thomas Jefferson University; David Delgado, PhD, MPH, Thomas Jefferson University; Edith Mitchell, MD, FACP, Thomas Jefferson University

Background: Previous research suggests that hepatocellular carcinoma (HCC) health disparities affect Asian Americans, a highly heterogeneous racial/ethnic population with many subgroups.

Objective: To explore the association of Asian American race/ethnicity with stage at diagnosis and initial treatment among patients diagnosed with HCC in California.

Design/Methods: A retrospective, cohort study using Surveillance, Epidemiology and End Results Program (SEER) data from 8,484 Californians of Asian and White race/ethnicity, aged 18-64, and diagnosed with HCC between 2007-2014. Descriptive statistics, chi-square tests, univariate and multivariate logistic regressions were performed.

Results: Regional/distant stage at diagnosis was higher among Filipinos (OR:1.69, 1.34-2.14), Koreans (OR:1.34, 1.00-1.79), earlier diagnosis 2007-2010 (OR:1.23, 95%CI:1.13-1.34), males (OR:1.37, 95%CI:1.22-1.54), Greater California (OR:1.22, 95%CI:1.09-1.37) and Los Angeles (OR:1.27, 95%CI:1.11-1.45) residence, and patients with public (OR:1.25, 95%CI:1.14-1.38) and no insurance (OR:2.19, 95%CI:1.78-2.70). Receipt of initial treatment was significantly higher among Chinese (OR:1.76, 95%CI:1.42-2.18), Koreans (OR:1.92, 95%CI:1.37-2.68), Vietnamese (OR:1.77, 95%CI:1.42-2.22), patients with localized stage (OR:4.08, 95%CI:3.62-4.58), and earlier diagnosis 2007-2010 (OR:1.12, 95%CI:1.01-1.25). Ages 50-64 (OR:0.83, 95%CI:0.71-0.97), male (OR:0.72, 95%CI:0.63-0.82), single status (OR:0.73, 95%CI:0.65-0.81), and patients with public (OR:0.45, 95%CI:0.40-0.51) and no insurance (OR:0.17, 95%CI:0.11-0.26) were associated with reduced odds of receiving initial treatment. Racial/ethnic disparities in stage at diagnosis and initial treatment remained after adjustment for sociodemographic and clinical characteristics.

Conclusion: Understanding disparities in HCC staging and treatment may 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 disproportionately affected high-risk populations.
2) UNDERSTANDING THE CONTRIBUTION OF NURSE STAFFING LAWS ON THE QUALITY OF PATIENT OUTCOMES IN THE UNITED STATES

Authors and Affiliations: Alsuwayidi Fatimah, MPH (c), Arcadia University; Margaret L. Longacre, PhD, Arcadia University

Background: Many factors contribute to patient outcomes, including nurse staffing. Nurse staffing refers to the nurse/patient ratios and credentials. In the U.S., states have varying nurse staffing laws and therefore it is crucial to understand how each policy might contribute to better patient outcomes and positive patient experiences.

Objective: The goal is to assess common quality indicators (i.e., patient outcomes and satisfaction) among different U.S. states that have enacted nurse staffing-related laws.

Design/Methods: Secondary data that are publicly available on the Hospital Compare website were analyzed descriptively. States were randomly selected and categorized based on the enacted nurse staffing laws since 2004. Two outcomes were selected and compared in the selected states based on the Donabedian’s model: healthcare-associated infection (HAIs) (technical outcomes) and patient satisfaction (interpersonal outcomes).

Results: Among the five states that were selected (CA, OH, IL, NY, MD), Ohio which enacted a nurse-driven staffing committee had higher patient satisfaction with nursing practice and had lower HAIs than the national average. Also, HAIs were lower in Illinois that enacted two nurse staffing laws (staffing committee and disclose of staffing levels). On the other hand, Maryland that enacted no nurse staffing-related laws had the worst patient satisfaction and higher HAIs than the national average.

Conclusion: Current nurse staffing laws present opportunities for more understanding and improvement in the quality of patient care. This is an important area of study given high morbidity and hospitalizations experienced in the U.S.
3) IMPORTANCE OF PHYSICAL FITNESS

Author(s) and affiliation: Katelyn Anderman, La Salle University, Brittany Edwards-Weick, La Salle University, Harrison Gargel, La Salle University, Jessica Lindsay, La Salle University, Serita M. Reels, MPH, MCHES, La Salle University

Background: According to Healthy People 2020, the goal for physical exercise for college-aged students is 75 minutes of vigorous activity or 150 minutes of light or moderate activity per week. Physical activity is a public health issue because the number of people who participate in aerobic exercise is far below what’s recommended. It is important for young adults to make physical activity a priority because those who do not exercise when they are young are more likely to avoid physical activity later in life, increasing their risk of obesity.

Objective: Our goal is to implement a health education program among college students that increase knowledge and awareness about the importance of physical activity. We will implement this by using the Transtheoretical Model.

Design/Methods: Data was collected by giving pre- and post-tests to students. Students were asked a variety of questions regarding physical activity and their current knowledge about physical activity.

Results: Preliminary results showed that 90% of students increased their knowledge of the importance of physical activity.

Conclusion: The program highlights the need for more health education that stresses the importance of physical activity among college students.
4) PREVALENCE OF HEPATITIS B VACCINATION (HBV) IN A RECENTLY RESETTLED REFUGEE POPULATION

Author(s) and affiliation: Lauren Bartolome, PharmD; Jennifer Voelker, PharmD; Alberto Batista, PharmD; Colleen Payton, MPH, MCHES; Vittorio Maio MS, MSPH; Marc J. Altshuler, MD

Background: Approximately 70,000 refugees have resettled to the US annually over the last several years. It is important for refugees to receive immunizations to prevent communicable diseases, such as Hepatitis B. For US-bound refugees, Hepatitis B serology is obtained to determine if vaccination is indicated.

Objective: To identify the prevalence of >1 Hepatitis B vaccine (HBV) documentation in a recently resettled refugee population.

Methods: A cross-sectional analysis of the Jefferson Longitudinal Refugee Health Registry was conducted. The registry contains clinical and demographic data from recently resettled refugees who received an initial domestic medical examination from a primary care clinic in Philadelphia, Pennsylvania within 2008–2016. The proportion of HBV documentation was computed among those with negative surface antigen serology to determine eligibility. Descriptive statistics and chi-squared tests were conducted examining distributions by gender, age groups, country of origin, and year of initial screen.

Results: 1,432 recently resettled refugees were eligible for receiving the HBV. The mean age of the study sample was 32 (SD + 16) and 660 (46%) were female. 78% of refugees had documentation of receiving >1 HBV. The prevalence distribution of documented HBV was not significantly different within gender and age groups, but was statistically significant for country of origin and year of initial medical screen (p<0.001).

Conclusions: We found a very high prevalence of HBV documentation among recently resettled refugees. Future research should explore linkage to vaccine completion, which is needed for school, employment, and green cards.
5) PREVALENCE OF INACTIVATED POLIO VACCINE (IPV) IN A RECENTLY RESETTLED REFUGEE POPULATION

Author(s) and affiliation: Alberto E. Batista, PharmD, Thomas Jefferson University; Colleen Payton, MPH, MCHES, Thomas Jefferson University; Vittorio Maio, PharmD, MS, MSPH, Thomas Jefferson University; Marc J. Altshuler, MD, Thomas Jefferson University

Background/Objective: In 2012, the World Health Organization developed a polio eradication plan aimed to end polio virus transmission by 2018. The CDC recently updated the treatment guidelines, requiring all infants and children ≤6 years old to receive ≥3 doses of Inactivated Polio Vaccine (IPV) including immigrants and refugees.

Methods: A retrospective analysis of the Jefferson Longitudinal Refugee Health Registry was conducted from 2008-2016. Refugees were categorized into two groups: 1 dose of IPV and completion of ≥3 doses of IPV. Descriptive statistics and Chi-square tests described and compared the relationship within these groups.

Results: A total of 225 refugees were identified in the study, 52% (n=117) were ≤6 years old and 48% (n=108) were 7-18 years old. Overall, 83% (n=186) had documentation of receiving 1 dose, and 62% (n=140) received ≥3 doses of IPV. All refugees who arrived from a country with an overseas vaccination program (n=12) received 1 dose, and 50% (n=6) received ≥3 doses of IPV. Of children ≤6 years old, 89% (n=104) received 1 dose and 78% (n=91) received ≥3 doses of IPV.

Conclusions: According to the CDC guidelines, the overall completion of the recommended IPV series among refugees was high in children ≤6 years old as well as refugees from a country with an overseas vaccination program.
PATIENT SATISFACTION AND PERCEIVED QUALITY OF CARE AMONG YOUNGER MEDICARE BENEFICIARIES ACCORDING TO ACTIVITY LIMITATION STAGES

Author(s) and affiliation: Olivia Bernal, BA, UPenn; Heather F. McClintock, PhD, MSPH, MSW, Arcadia University; Jibby E. Kurichi, MPH, UPenn; Pui Kwong, MPH, UPenn; Dawei Xie, PhD, UPenn; Joel Streim, MD, UPenn; Liliana Pezzin, PhD, JD, UPenn; Hillary Bogner, MD, MSCE, UPenn

Background: Medicare beneficiaries aged 65 years and older with greater disability are less satisfied with their medical care compared to beneficiaries without disability. However, there is little research on satisfaction measures in younger Medicare beneficiaries (under 65 years).

Objective: Examine the association between disability severity, quantified by activity limitation stages, and patient satisfaction and perceived quality of medical care among younger Medicare beneficiaries.

Methods: Cross-sectional study examining community-dwelling Medicare beneficiaries less than 65 years of age who participated in the Medicare Current Beneficiary Survey (MCBS). Persons were classified into an activity limitation stage based on self-reported difficulty performing activities of daily living and instrumental activities of daily living, and responses to MCBS questions in five patient satisfaction domains were analyzed for association.

Results: Beneficiaries at higher activity limitation stages with greater disabilities reported less satisfaction with access to medical care, with adjusted odds ratios (95% CI) ranging from 0.62 (0.53-0.72) at stage I (mild disability) to 0.31 (0.22-0.43) at stage IV (severe disability).

Conclusion: Younger Medicare beneficiaries with disabilities reported decreased satisfaction with access to medical care, highlighting the need to improve access to healthcare for this growing population of Medicare beneficiaries.
7) SLEEP DEPRIVATION AMONG INCOMING SENIORS

Author(s) and affiliation: Kayla Berry, La Salle University, Shayla Smith, La Salle University, Caciana Cayo, La Salle University, Mileidys Barreto-Colon, La Salle University, Serita Reels MPH, MCHES, La Salle University.

Background: The primary impact that sleep deprivation has on college student is memory loss. Many students are becoming victims of sleep deprivation because of academic, financial, and social stressors. Unfortunately, this puts students at a high risk for other sleep disorders and poor academic outcomes.

Objective: The goal is to implement a health education workshop to help students gain knowledge on how to improve their sleep hygiene, and to lower their risk for sleep deprivation by gaining accurate information.

Methods: The Health Belief Model and Theory of Reasoned Action was used as the theoretical framework for the health education workshop. A 35-minute health education workshop and 10-minute app demonstration were implemented with juniors in the Bachelor of Public Health Program. A pre/post-test design was used for data collection.

Results: A pre and post-test was distributed to (N= 19) students graduating between 2018-2020. 63% of students stated stress impacted their ability to fall asleep or sleeping through the night three to four days a week. 26% stated stress impacted their sleep two times a week. In the pre-examination, 86% of students increased their knowledge on the impact of sleep deprivation on memory loss and academic achievement.

Conclusion: The preliminary findings demonstrated the need for health education programs to increase knowledge and awareness on sleep deprivation and its potential impacts on mental health and other sleep disorders.
8) AN ANALYSIS OF EMPLOYER PERCEIVED BARRIERS TO HIRING PERSONS WITH INTELLECTUAL DISABILITIES

Author(s) and affiliation: Cody Brenneman and Heather F. de Vries McClintock, PhD, MSPH, MSW, Arcadia University

Background: Employment of people with intellectual disabilities is lower than the general population, partially attributed to employer hesitancy to hire. Evidence suggests employees with intellectual disabilities have greater potential than previously understood. Comparative studies have yet to determine the largest concerns employers have about hiring and how that compares to the current understanding of employee capabilities.

Objective: The purpose of this study is to a) identify major factors that influence employers in hiring people with intellectual disabilities, b) delineate the types of employers with high levels of perceived barriers and c) determine whether the perceived barriers are justified based on current evidence.

Design/Methods: A comparative analysis was conducted to explore the most crucial employer perceived barriers to employing persons with intellectual disabilities and whether those barriers align with the current understanding of this population’s employment potential.

Results: Employers who had hired fewer persons with disabilities and had a history of resistance to the Americans with Disabilities Act (ADA) accommodation requirements tended to endorse perceived barriers related to costs, company culture, and lower productivity at a greater rate than those who hired often and were compliant with the ADA. Employers lacked knowledge of employment resources regardless of hiring experience or ADA compliance.

Conclusion: Employers with concerns about cost, company culture and productivity are recommended to adhere to ADA accommodation requirements to decrease concerns. Employers lacking knowledge should be made aware of disability accommodation resources. Through an appropriate employment process, employer concerns may decrease, suggesting potential for increased future employment opportunities.
9) MASS SHOOTINGS AND VIOLENCE-RELATED MENTAL ILLNESS STIGMA ON TWITTER

Author(s) and affiliation: Budenz, A., MA, Drexel University; Massey, P., PhD MPH, Drexel University; Purtle, J., DrPH, MPH, MSc, Drexel University

Background: In response to mass shootings, the public has come to link mental illness to acts of gun violence. One such shooting was the Ft. Lauderdale airport shooting on January 6, 2017, which received national media coverage that emphasized the perpetrator’s mental health.

Objective: This study aimed to quantify violence-related mental illness stigma on Twitter in the wake of this shooting, in terms of geographic location.

Design/Methods: We collected publicly available Twitter data related to mental health/illness between December 23, 2016 and January 20, 2017 and analyzed a subsample of tweets published from Florida (shooting location) and Virginia (control). We manually coded 3,283 tweets to build machine learning models to classify the remaining sample in terms of violence stigma, then quantified temporal trends in violence stigma in these states during the study period. Finally, we built a logistic regression model to determine which tweets had the most retweets during the shooting.

Results: We analyzed 38,634 tweets and found that violence stigma increased sharply in both states (8.71% to 18.49% in Florida, 4.03% to 15.96% in Virginia) directly following the shooting. Tweets containing violence stigma also had an increased odds of being retweeted at high rates.

Conclusion: Our findings suggest that violence-related mental illness stigma on Twitter during shooting events transcends the geographic location of the event. Tweets containing violence stigma also had increased odds of reaching a larger audience, suggesting widespread endorsement of these attitudes. These findings demonstrate a need for stigma reduction advocacy on social media during these events.
10) ALCOHOLISM AWARENESS IN COLLEGE STUDENTS

Author(s) and affiliation: Maria Cashman, La Salle University; Jorge Burgos, La Salle University; Bassam Odtallah, La Salle University; Valerie Pineiro, La Salle University, Serita Reels, MPH, MCHES, La Salle University.

Background: Individuals who engage in binge drinking during college are more likely to suffer from alcoholism later in life. While there are many predispositions to alcoholism, health education and promotion interventions that focus on the psycho-social aspects of binge drinking among college students are needed.

Objective: The goal of this project is to increase awareness and knowledge of binge drinking among college students by implementing a health education lecture that educates students on: 1) the impact and consequences of binge drinking, 2) how to live healthier lifestyles, 3) appropriate decision-making in social situations, and 4) how to employ proper coping mechanisms when stressed.

Methods: Data was collected using a pre/post-test design. From the health education lecture, students gained knowledge about binge drinking, alcohol statistics on college campuses; the effects alcohol has on the body; learned about on-campus resources, and gained knowledge on how to live without the need to binge drink.

Results: Preliminary results showed that the lecture increased undergraduate students’ knowledge and awareness of binge drinking and alcoholism on campus. Participants are La Salle University undergraduate students.

Conclusion: These preliminary findings showed an increase in students’ alcohol awareness at La Salle University. With adequate health education on this issue, students are less likely to have alcohol abusive tendencies later in life.
11) RELATIONSHIP BETWEEN INFANT FEEDING DIFFICULTIES IN NEONATAL ABSTINENCE SYNDROME AND REGIONAL LOCATION OF BABY-FRIENDLY HOSPITALS

Author(s) and affiliation: Feba Cheriyan, MPH (c), Arcadia University; Katie DiSantis, PhD, MPH, Arcadia University

Background: Neonatal Abstinence Syndrome (NAS) is caused by maternal substance abuse and is characterized by the following symptoms: difficulty feeding, tremors, and increased infant irritability. Breastfeeding has been identified as an alternative to pharmacotherapy drugs to help to relieve symptoms of NAS.

Objective: Assess health risks to homeless populations, and consider better outreach methods to engage homeless during heat events to lessen future adverse health impacts.

Methods: Conducted three focused workgroups and seven semi-structured interviews with homeless service personnel on the effectiveness of street outreach to homeless pre-season and during excessive heat events.

Results: There are currently more known services for extreme cold weather than extreme hot weather. Cooling centers and spray grounds are not promoted well, which could contribute to low attendance. Evaluation of medical examiner data and National Weather Service data revealed heat-related deaths have occurred days after a heat event ended. This means current thresholds for declaring and deactivating heat events are inaccurate.

Conclusion: Revisions to the Excessive Heat Plan will include changing thresholds for declaring excessive heat events, implementing new outreach strategies, and establishing routine evaluations of cooling centers to measure the effectiveness of messaging and outreach campaigns. Thresholds for activation of excessive heat responses should be lower for homeless who primarily live on the street and are continually exposed to the ambient temperature.
12) THE EFFECT OF THE BUILT ENVIRONMENT ON COMMUNICATION PATTERNS IN THE EMERGENCY DEPARTMENT

Author(s) and affiliation: Allison David, BS, Sidney Kimmel Medical College at Thomas Jefferson University; Kailey Tindle, BS, Sidney Kimmel Medical College at Thomas Jefferson University; Bon Ku, MD, MPP, Thomas Jefferson University

Background: The physical layout of the Emergency Department (ED) affects the way in which patients and providers move within the space and can cause substantial changes in workflow and efficiency depending on the specific design. However, there is no one ED design that has been proven to deliver the best care.

Objective: The goal of the study was to examine how different ED designs (centralized versus decentralized) affect communication patterns among doctors and nurses.

Design/Methods: By developing a novel tablet-based digital mapping tool using a cloud-based mapping platform (ArcGIS), data on nurse-physician interactions and actions were collected and mapped to a precise location within the ED, while nurses were tracked during the entirety of a work shift.

Results: Nurses working within the decentralized ED design spent 6% of their time interacting with physicians, while nurses working within the centralized ED design spent only 3% of their time interacting with physicians.

Conclusion: Preliminary findings suggest that the ED design affects communication patterns among healthcare professionals. Our new method of data collection allows for collection of a large amount of data that can be used to evaluate these patterns to aid in future hospital design.
13) EXAMINING NUTRITIONAL KNOWLEDGE AND BEHAVIORS BETWEEN ATHLETE AND NON-ATHLETE STUDENTS AT TEMPLE UNIVERSITY

Author(s) and affiliation: Hana Davis, Dr. Gina Tripicchio. Temple University College of Public Health

Background: Understanding if collegiate athletes have adequate dietary behavior and nutritional knowledge is important, but little is known about this topic.

Objective: The study examined dietary nutrition knowledge and behaviors of collegiate athletes and compared results to non-athlete students at Temple University. The results will contribute to better understand whether athletes have adequate knowledge about nutrition. Findings can be used to improve dietary behaviors among athletes.

Design/Methods: Various questions assessed nutritional knowledge and behaviors. Questions were asked to determine the primary dietary concern and the type of intervention athletes would prefer to improve their behavior and knowledge.

Results: A majority (84%) of athletes reported trying to have a healthy diet but only 48% of athletes consumed one serving of fruit daily. The highest percentage of athletes (28%) reported obtaining a majority of their nutrition knowledge from the internet, and 6% reported getting this information directly from athletic staff. Primary nutrition related concern among athletes and non-athletes were to “feel healthy”. Both group’s primary intervention method was to obtain information on affordable and easy recipes. There was no overall difference between nutritional knowledge and behaviors among athletes and non-athletes.

Conclusion: Athletes do not have better dietary behaviors and nutritional knowledge than non-athletes. To improve the athlete’s dietary behaviors and nutritional knowledge, interventions should address their primary dietary concern (feeling healthy) and use the methods they prefer (information on healthy affordable recipes and meal planning). Using coaches and athletic staff to relay nutrition information could be a promising approach.
PREDICTING SLEEP HYGIENE AND SLEEP DURATION IN COLLEGE STUDENTS: AN APPLICATION OF THE THEORY OF PLANNED BEHAVIOR

Author(s) and affiliation: Whitney DebRoy, MPHc, Arcadia University; Dr. Andrea Crivelli-Kovach, PhD, MA, MCHES, Arcadia University

Background: Adults aged 18 to 60 are recommended to sleep at least seven hours per night on a regular basis to promote health. Literature indicates that a majority of college students are sleep deprived, which has negative health implications such as increased risk for chronic disease and death. Little is known about the predictors of sleep hygiene behaviors and sleep duration to guide sleep promotion programs for college students.

Objective: The purpose of this study was to a) determine if sleep hygiene behaviors and sleep duration were predicted by the Theory of Planned Behavior (TPB) constructs (perceived behavioral control (PBC), attitudes, subjective norms, and behavioral intention), b) determine if sleep duration varied based on circadian preference, sleep quality, and sleep hygiene behavior practice, and c) determine if sleep hygiene behavior, circadian preference, and sleep quality predict sleep duration.

Design/Method: A survey questionnaire was used to collect data on sleep quality, circadian preference, sleep hygiene behaviors, PBC, attitudes, subjective norms and behavioral intention regarding sleep behaviors. A convenience sample of undergraduate students enrolled in Public Health courses at Arcadia University were recruited as participants. Multiple linear regression will determine if the TPB constructs predict sleep hygiene and sleep duration in college students.

Results: Participants (N=65) were mostly female (80%), Caucasian (67.7%), full-time students, with a mean age of 20.18 years.

Conclusion: The results from this study may be used to guide the development of sleep promotion programs for college campuses.
15) ELECTRONIC MEDICAL RECORD-BASED CLINICAL DECISION SUPPORT TOOLS FOR TRANSITIONING ADOLESCENTS AND YOUNG ADULTS FROM PEDIATRIC TO ADULT CARE

Author(s) and affiliation: Jakob Dobrowolski, Policy Lab, CHOP and the MPH Program, University of Pennsylvania; Caren Steinway, Division of General Pediatrics, Cohen Children’s Medical Center of New York; Katherine Wu, Division of Oncology, CHOP; John Berens, Internal Medicine/Pediatrics, University of Pennsylvania; Adam Greenberg, Policy Lab, CHOP; Zia Gajary, Karabots Pediatric Care Center, CHOP; Dava Szalda, Division of Oncology, CHOP; Sophia Jan, Division of General Pediatrics, Cohen Children’s Medical Center of New York

Background: Despite national recommendations for transitioning adolescents and young adults (AYA) to adult healthcare, challenges persist. Electronic Medical Record (EMR)-based clinical decision support (CDS) tools have demonstrated effectiveness at addressing many clinical scenarios.

Objective: To test the effectiveness of an EMR-based CDS tool to improve discussion of transition to adult healthcare in a large, urban, pediatric primary care center.

Design/Methods: An existing EMR-based Best Practice Advisory (BPA) was adapted for two pediatric primary care centers to prompt discussion of transition-related services. The alert is triggered by age and care episode. The BPA includes bundled orders and transition resources. To assess the BPA’s efficacy on prompting transition discussions during visits, patients aged 16 years and older were surveyed after their visit to assess if transition-related topics were discussed. Survey topics included: transfer to adult healthcare, self-efficacy, system changes, speaking privately with the provider, and receipt of written transition plan. Surveys were collected 1 week/month x 2 months prior to BPA implementation and continued to be collected monthly after initiation.

Results: 57 baseline surveys were collected; 44 patients completed post-implementation surveys. The proportion of patients reporting discussion of 2 or more transition topics increased (73% vs. 54%) after BPA initiation compared to baseline. Fewer transition discussions were reported after BPA launch (12% vs. 4%), however samples sizes were small.

Conclusion: EMR-based CDS may be effective at improving transition discussions for AYA; however, CDS may intimidate some providers from discussing transition. Future work will focus on increasing provider uptake of CDS tools.
16) ASSESSING VARIABILITY IN END-OF-LIFE INTENSITY OF CARE AFTER OUT-OF-HOSPITAL CARDIAC ARREST

Author(s) and affiliation: Polina Ferd, MD Candidate, Thomas Jefferson University; David Karp, MUSA, Perelman School of Medicine; Alexis Zebrowski, PhD Candidate, Perelman School of Medicine; Brendan Carr, MD, MA, MS, Thomas Jefferson University

Background: Out-of-hospital cardiac arrest (OHCA) affects over 300,000 Americans per year. Many factors affect the outcome of OHCA, but little research has focused on the impact of end-of-life (EOL) procedures in this patient population.

Objective: This study sought to describe the variability of EOL procedures after OHCA.

Design/Methods: We performed a retrospective cohort analysis using New York State emergency department and inpatient claims data from 2013. We identified adult patients presenting to hospitals with a primary diagnosis of OHCA. Descriptive statistics were conducted using six EOL procedures: intubation/mechanical ventilation, tracheostomy, gastrostomy tube, hemodialysis, enteral/parental nutrition and CPR. Results were stratified by age (<65 and ≥65 years) to investigate differences in procedure frequencies.

Results: Our final dataset analyzed 14,913 patients. 60% of the population was ≥65 years old. Unadjusted outcomes for the total population were as follows: 59% died in the ED, 21% died post-admission, 10% were discharged home and 10% were discharged elsewhere. Most patients received 1 EOL procedure (42% and 40% of patients <65 and ≥65, respectively). The two most common procedures for patients <65 and ≥65 were CPR (53% versus 49%) and intubation/mechanical ventilation (47% versus 43%), respectively.

Conclusion: Our results inform what EOL procedures are frequently seen in this population, as well as differences by age. This preliminary analysis directs our future work into assessing EOL intensity of care and outcomes in patients with OHCA.
17) CONSIDERING KIDNEY FUNCTION WHEN SCREENING FOR HEPATITIS C VIRUS

Author(s) and affiliation: Chelsey Fix, Temple University, Crystal Gadegbeku, MD, Temple University Hospital

Background: State mandates have prompted hospitals to implement Hepatitis C Virus (HCV) screening programs to capture high-risk individuals and facilitate treatment. It is not standard to screen kidney function before treating HCV, despite evidence of increased risk of chronic kidney disease (CKD). Individuals living with HCV and CKD may eventually require a kidney transplant, and can receive a cadaver HCV positive kidney significantly sooner if they delay HCV treatment until after the transplant.

Objective: The goal of this project was to identify the proportion of HCV patients with kidney disease at Temple University Hospital (TUH) and use that data to design a tool within the hospital’s electronic health record system to facilitate proper nephrology care.

Design/Methods: Data were collected from the electronic health records of HCV patients at TUH that were seen for the first time in 2017 for HCV treatment. Demographic information, data about kidney function, and information about the referring department were collected. Patients that would have benefitted from a nephrology consultation before HCV treatment were identified.

Results: Of the 637 patients seen for HCV treatment at TUH, 29 (4.6%) were seen by a nephrologist. An additional 84 (13%) patients were identified as having an estimated glomerular filtration (eGFR) rate less than sixty, making them candidates for nephrology care before HCV treatment. Twenty-five patients were found to have an eGFR less than thirty, warranting urgent nephrology care.

Conclusion: New technology to identify late stage CKD patients would increase the number of HCV patients receiving nephrology care at TUH.
18) AN UNDUE BURDEN: AN ASSESSMENT OF PENNSYLVANIA COUNTY COURTS’ AWARENESS OF JUDICIAL BYPASS

Author(s) and affiliation: Kimya Forouzan, JD/MPH Candidate, Temple University

Background: Under Pennsylvania law, minors seeking abortions must gain permission from a parent/guardian. In order for this requirement to be constitutional, states must provide an alternative, usually in the form of the judicial bypass procedure, in which a judge can grant approval for a minor.

Objective: The purpose of this study was to conduct a needs assessment of Pennsylvania county courts’ levels of awareness of judicial bypass provisions.

Design/Methods: This research project consisted of qualitative, telephonic interviews in 30 randomly selected county courts. The interviewees were attorneys, or, otherwise, the individual in that courthouse that would field calls from the public asking for legal information. Qualitative interview questions were adapted from the last needs assessment, conducted 20 years ago. The questions evaluated participants’ awareness of the existence of judicial bypass as an option for minors, provision of representation, waiving of filing fees, and confidentiality.

Results: 8 of the 30 court officials were aware of judicial bypass as an option. All of the 8 were able to provide correct information about the other requirements. 6 of these 8 indicated that they worked with local clinics as intermediaries to communicate the process to minors. The remaining 22 courts surveyed were unable to identify or provide information about judicial bypass.

Conclusion: This evaluation supports the need for improved education among county court officials and systems for guiding minors through this process.
19) ASSOCIATION OF SOCIAL COHESION WITH HEALTH OUTCOMES IN THE SOMERSET NEIGHBORHOOD OF KENSINGTON

**Author(s) and affiliation:** Alexander Fossi, MPH (c), Jefferson College of Population Health, Russell McIntire, Ph.D., Jefferson College of Population Health

**Background:** This study was conducted in collaboration with the New Kensington Community Development Corporation to improve our understanding of the role of social cohesion in the Somerset neighborhood and to guide future efforts to improve the health of this community. Social cohesion has been hypothesized to be related to a number of health outcomes, and we designed this study to examine this relationship in a specific population.

**Objective:** This study explored the association between social cohesion and self-reported health in the Somerset neighborhood of Philadelphia.

**Design/Methods:** We used linear regression to evaluate cross-sectional survey data collected from 328 neighborhood residents. We collected data 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.

**Results:** Social cohesion was found to be significantly associated with self-reported health. Controlling for other factors, social cohesion (SC) accounted for 3.4% of the variability in self-reported health (R2 without SC = .221, R2 with SC = .255). This result was strongly significant (p=.002).

**Conclusion:** We found a significant relationship between social cohesion and health in the Somerset neighborhood. We also found a number of areas that may be worth future exploration; these include examination of the relationship between social cohesion and stress and whether social cohesion can be considered a protective factor against chronic disease.
20) CONCUSSION RISK PERCEPTIONS AMONG HIGH SCHOOL FOOTBALL PLAYERS: POTENTIAL CUES TO ACTION AND MODIFYING FACTORS

Author(s) and affiliation: Nicole Gregoire, MPH (c), Katie DiSantis, PhD, MPH Arcadia University

Background: Concussions and repetitive head impacts (RHI) in American football are a growing public health concern. These injuries are associated with adverse health consequences, to which younger athletes are more susceptible. The persistently high prevalence of underreporting of concussion-like symptoms suggests that further investigation of the factors influencing an athletes’ perceptions of risk is warranted.

Objective: The purpose of this study was to evaluate concussion risk perceptions among high school American football athletes, and how cues to action and modifying factors influence those perceptions.

Design/Methods: A qualitative self-administered survey was disseminated on-site to all eligible football athletes at one high school in Montgomery County, Pennsylvania. The survey included 47 items, primarily agreement scales, that measured participants’ perceived susceptibility, perceived severity, knowledge, and various potential cues to action and modifying factors.

Results: Data collection for the on-site, paper survey will be completed in March. A multiple logistic regression model will be used to investigate the association between risk perception and modifying factors or cues to action. Data analysis will be completed in April.

Conclusion: It is predicted that the modifying factors and cues to action will have positive correlations with risk perception. If this is supported, it will encourage further research on the factors that influence high school athletes’ perception of concussion risk.
21) PARENTAL INFLUENCE ON PHYSICAL ACTIVITY IN AFRICAN-AMERICAN CHILDREN AGE 3-7

**Author(s) and affiliation**: Keira R. Hall, B.S., MPH Candidate in Department of Public Health, Temple University; Dr. Elizabeth Prout, Pediatrician, Childhood obesity researcher, and Medical Director of the Adolescent Bariatric Surgery Program, Children’s Hospital of Philadelphia.

**Background**: Research indicates that parents influence their children's physical activity (PA) and sedentary behaviors (SB) through their parenting styles and practices. Many African-American children are at a disadvantage when it comes to food access, meeting physical activity requirements and access to resources to obtain a healthy weight.

**Objective**: The purpose of this research project is to assess how parental role modeling and parental social support influence physical activity in African-American children ages 3-7.

**Design/Methods**: Data was obtained from the study Too Blessed To Be Stressed conducted by Dr. Elizabeth Prout at the Children’s Hospital of Philadelphia. Participants were recruited from churches, The Children Hospital of Philadelphia and communities in Philadelphia, PA. Data on physical activity and sedentary behavior were collected using a questionnaire and by accelerometer. Linear regression and multilinear regression analyses were completed to examine associations between parenting style and children measured physical activity.

**Results**: Parenting style (authoritarian, authoritative and permissive) did not show an association with child MVPA. In the univariate analyses, depression, anxiety and parent sleep quality negatively influenced child MVPA. Majority of the adult participants were obese (51.28%) and the child participants were of normal weight (71.34%). 82% of the children participants met the daily physical activity requirements of 60 minutes a day.

**Conclusion**: Research has shown that parents influence their child’s physical activity habits. These findings suggest that parenting style does not have a strong association with child physical activity, but other parental factors may show a stronger influence.
22) MAPPING SOCIODEMOGRAPHIC AND HEALTH SENSITIVITY TO EXTREME HEAT EVENTS: PHILADELPHIA'S HEAT VULNERABILITY INDEX

Author(s) and affiliation: Jason Hammer, BA, University of Pennsylvania; Chad Thomas, MPH, Philadelphia Department of Public Health; Sarah Wu, MUP, Mayor’s Office of Sustainability

Background: Exposure to extreme heat has contributed to more deaths in the past decade than any other climate-related hazard, driven largely by mortality among vulnerable populations in urban environments. Extreme heat can lead to a wide range of health issues as well as exacerbate chronic medical conditions. Cities experience higher temperatures on average than their rural surroundings, due to the urban heat island effect.

Objective: We sought to geographically identify the neighborhoods in Philadelphia most vulnerable to extreme heat events and the community assets available that may assist in mitigating its effects and preparing its residents.

Design/Methods: We developed a heat vulnerability index (HVI), which summarizes the most important factors associated with the adverse health effects of extreme heat. A literature review was conducted to determine the most prevalent factors included in city and state HVIs across the U.S. We selected 12 sociodemographic and health variables to include in the final principal component analysis, based on their relevance to the population of Philadelphia and the data available. Sensitivity scores for each census tract were calculated and mapped using GIS, with surface temperature data overlaid to illustrate overall vulnerability.

Results: Maps indicate that the most vulnerable neighborhoods are concentrated in areas of North, West, and South Philadelphia. Community assets in these areas such as cooling centers and registered community organizations present potential partnerships, which may enhance adaptive capacity.

Conclusion: These study results can help inform future preparedness and mitigation initiatives and aid in addressing issues of health inequity throughout the city.
23) QUITTING “COLD TURKEY”: NEW INSIGHTS FROM CURRENT AND FORMER TOBACCO SMOKERS

Author(s) and affiliation: Vishakha Hariawala, 1 Appathurai Balamurugan, MD, DrPH, 1, 2, 3 Robert Delongchamp, PhD, 1, 2 Cindy Bennett, 4 Mariah Fletcher, 1 Deborah Rushing, LADAC, CTTS-M, 1 J. Gary Wheeler, MD, MPS, 1, 2, 3

1 Arkansas Department of Health
2 Department of Epidemiology, University of Arkansas for Medical Sciences College of Public Health
3 Department of Family and Preventive Medicine, University of Arkansas for Medical Sciences
4 University of Arkansas at Little Rock Institute of Government Applied Research Group

Background: Two-thirds to three-fourths of successful quitters quit smoking unassisted without using pharmacotherapy or tobacco counseling. Public health interventions toward cessation seem to have missed opportunities to support this key population of smokers that wish to quit “cold turkey” or unassisted.

Objective: We sought to explore individual perceptions and attitudes related to smoking and quitting using the “cold turkey” method to develop a new campaign targeting this group of smokers. Our study looked at two focus groups of (i) past smokers that successfully quit cold turkey and (ii) current smokers that attempted cold turkey but were unsuccessful.

Design/methods: Two focus groups lasting 90 minutes each. Group 1: Quit smoking “Cold Turkey” (n=11). Group 2: Unsuccessful in Quitting “Cold Turkey” (n=12). Individuals were recruited from the 2016 Arkansas Adult Tobacco Survey pool of respondents. Groups were moderated by a third-party research team. Participants completed a confidential Lifestyle Survey prior to the focus group discussion to gain additional smoking-related information. Video recordings and transcripts were made available to the Arkansas Department of Health.

Results: Former smokers that quit “cold turkey” stated it worked because they were finally “ready to quit”. Current smokers that failed the “cold turkey” approach attributed their failure to lack of readiness and skepticism towards any quit approaches. Additionally, negative messages were minimally impactful with regard to quitting.

Conclusion: The focus groups revealed that a “cold turkey” public health campaign should be positive, empowering, and demonstrate the scope for renewed health. Telling people what quitting WILL DO, not what NOT QUITTING WILL DO appeared vital in this sample.
24) THE EFFECTS OF BULLYING VICTIMIZATION AND NEGATIVE SELF-CONCEPT ON SCHOOL ACHIEVEMENT AND PLANNING FOR COLLEGE EDUCATION: A STRUCTURAL EQUATION MODEL

Author(s) and affiliation: Soojung Hong, BSN, La Salle University

Background: Bullying victimization and negative self-concept can be risk factors for poor childhood school achievement that may pose adverse effects on attaining college education. Since low education attainment can be associated with poorer income and health outcomes in adulthood, understanding the risk factors for poor education attainment can be crucial.

Objective: This study aimed to investigate the impact of bullying victimization and negative self-concept on the school achievement and planning for college education.

Design/Methods: Data were collected from the Panel Study of Income Dynamics (PSID) Child Development Supplement (CDS). A national sample of 1,508 youth participants (≤ 17 years old) were drawn from the 2014 CDS data. Structural equation modeling (SEM) was used to test the path of relations between two exogenous latent variables (bullying victimization and negative self-concept) and two endogenous latent variables (school achievement and planning for college).

Results: The SEM provided a good fit for the data (x²=301.279, CFI=0.976, TLI=0.968, RMSEA=0.058). Peer victimization and negative self-concept were negatively associated with school achievement (β=-0.879, p<0.001) and planning for college (β=-2.45, p<0.001), respectively. School achievement positively correlated with planning for college (β=2.114, p<0.001).

Conclusion: The preliminary test results show that bullying victims with negative self-concept may experience lower academic achievement and difficulties in pursuing college education.
25) THE PSYCHOLOGICAL EFFECTS OF SEXUAL OBJECTIFICATION AND ITS EFFECT ON AFRICAN AMERICAN WOMEN

Author(s) and affiliation: Diana Jackson, MPH, La Salle University.

Background: African American women have long been the victims of sexual objectification experiences (SOE). Studies show that sexual objectification, in the form of sexual harassment, disproportionately affects African American women resulting in increased psychological distress. This research intends to further explore the intersection of SOE and the psychological effects that result. The study will examine instances of sexual harassment from the National Intimate Partner and Sexual Violence Survey (NISVS). The research questions that led to this study were: How many instances of SOE do African American women face overtime and What role does SOE play in increased psychological distress?

Objective: The goal of this study was to examine the psychological effects that African American women face due to increased SOE over time.

Design/Methods: Secondary data obtained from the CDC’s NISVS will be analyzed using SPSS multi regression analysis. This operational defined study will assess the frequency of SOE and increased psychological distress.

Results: A review of literature revealed numerous sociocultural influences that aided the SOE of African American women and that they are positively correlated with psychological violence. Findings from data reveal that sexual objectification directed towards African American women result in increased psychological distress.

Conclusion: This study is significant to better understanding trauma related to sexual objectification and could contribute to targeted treatment or programming to reverse the damages of continued objectification towards African American women.
26) SEXUAL HEALTH WORKSHOP

Author(s) and affiliation: Gabriela Jordan, BSPH, La Salle University; Bret Woldezghi, BSPH, La Salle University; Jennifer La, BSPH, La Salle University; Charlene Coleman, BSPH, La Salle University; Lisa Wajda, BSPH, La Salle University; Serita Reels MPH, MCHES, La Salle University

Background: Contracting a sexually transmitted infection is a concern among all sexually active individuals. However, the CDC estimates that half of all sexually transmitted diseases are contracted by young people ages 15-24 and account for 10 million new sexually transmitted infections in the U.S each year. Consequently, there is still a strong need for sexual health education among college students.

Objective: The Health Belief Model was used to examine the attitudes and beliefs of young college students on HIV/AIDS and STIs. The goal is to implement a health education workshop for students to increase awareness about HIV/AIDS and STIs, identify the knowledge they’ve acquired to reduce risks of contracting HIV/AIDS and STIs, and identify resources on and off campus for STD prevention.

Design/Methods: A 45-minute lecture with an interactive game, videos, and pamphlets was implemented with 15-25 La Salle University undergraduates. Students were educated on prevention and protection of sexually transmitted infections, HIV, and AIDS. A pre-posttest designed was used assess awareness and knowledge.

Results: Preliminary results showed that sexual education courses for college students increase knowledge and positive sexual health behaviors.

Conclusion: Sexual health education among college students is an effective prevention strategy among college students.
27) FACTORS IMPACTING OLDER LATINA’S LIKELIHOOD OF REGISTERING AS POSTHUMOUS ORGAN DONORS

Author(s) and affiliation: Patrick Kelly, Temple University; Chidera Agu, MPH, MSW, Temple University; Megan Urbanski, MSW, LCSW, Temple University; Heather Traino, PhD, MPH, Temple University

Background: The supply of transplantable organs remains at inadequate levels to meet the demand of the growing national transplant waitlist. Hispanic/Latino individuals are over-represented on the transplant waitlist but are less likely to register as deceased organ donors.

Objective: The purpose of this research was to understand the barriers and motivators to donor registration among older (50+) Latina and lay health educators (Promotoras).

Design/Methods: Focus group interviews were conducted with Promotoras (n=4) and older (age 50-64) and mature (65+) Hispanic Women (n=8) from three cities with diverse Hispanic populations: Chicago, Philadelphia, and San Antonio. Spanish-speaking moderators led, digitally audio recorded, transcribed verbatim, and translated each focus group from Spanish to English. Transcripts were analyzed by content analysis. Two trained research assistants independently coded each transcript. Qualitative data analysis software, MAXQDA 12, facilitated coding and reliability analysis. Intercoder reliability, as assessed via percent agreement, ranged from 87.27%-100% across transcripts; coding disagreements were resolved through discussion.

Results: Thematic analysis revealed three themes into which barriers and motivators were categorized: knowledge, attitudes, and behavior. Content analysis identified seventeen discrete barriers to registration, along with five unique motivators.

Conclusion: This work identified factors to be addressed in the development of culturally-appropriate programs to increase donor registration among Hispanic populations in the United States.
28) PATIENT AND PROVIDER PERSPECTIVES ON COLLECTION OF PATIENT SEXUAL ORIENTATION AND GENDER IDENTITY INFORMATION IN THE CLINICAL SETTING

Author(s) and affiliation: Nicky Knepp, Drexel University, Shannon Ogden, University of Pennsylvania, Kathryn Sheffey, University of Pennsylvania, Melissa Dichter, University of Pennsylvania

Background: Sexual orientation (SO) and gender identity (GI) are often linked together when discussing health disparities among Lesbian, Gay, Bisexual, and Transgender (LGBT) individuals, however, these identities are separate and are not being discussed equally in the clinical setting. The lack of conversation around these identities continues the cycle of inequality among this vulnerable population by refusing the opportunity to develop a holistic understanding of the patient.

Objective: The purpose of this study was to assess healthcare providers’ and patients’ perspectives on how SO and GI are collected in the clinical setting.

Design/Methods: 25 one-on-one interviews were conducted with providers while focus group data were collected from 34 students to capture patient perspectives. Transcripts were coded and analyzed utilizing principles of grounded theory to identify themes within and across groups.

Results: Findings suggest that both patients and providers are more comfortable discussing SO than GI. SO is related to external factors like sexual behavior compared to internal, arguably more complex factors. Both groups noted the importance of knowing and respecting patient’s GI in clinical care, but experienced discomfort with or uncertainty about how to initiate the discussion. Patients also felt unclear about the relevance of GI to their immediate healthcare concerns, aside from building a relationship with their provider and fostering a more holistic approach to healthcare.

Conclusions: Our findings provide support for GI and SO conversations between patient and provider to normalize these discussions and create a holistic approach to patient care in the clinical setting.
29) MEDIA INFLUENCE ON BODY IMAGE AND BODY DISORDERS

Author(s) and affiliation: Bailey Koch, BSPH, La Salle University; Stefine Georges, BSPH, La Salle University; Kaela Rivera, BSPH, La Salle University; Chantal Warfield, BSPH, La Salle University; Serita M. Reels, MPH, MCHES, La Salle University.

Background: A growing public health concern is media’s influence on body image. Consequently, negative body image is a leading risk factor for body and eating disorders. 74% of young women (ages 13-21) say they feel the pressure to be perfect, while numerous studies have linked exposure to the thin ideal perpetuated by the mass media to body dissatisfaction, and disordered eating among women.

Objectives: The goal of this program is to implement a health education workshop with college students that: 1) increases student knowledge on the media’s role on influencing the individual’s perception of body image, 2) increases students’ ability to differentiate between Anorexia Nervosa, Bulimia Nervosa, and Binge Eating, 3) teach students how negative body imaging can be a leading factor in eating disorders, and 4) provide students with additional educational resources about body image and eating disorders.

Design/Methods: This project is based on the Social Cognitive Theory. An hour-long educational session will be held to bring awareness of the media’s influence on body imaging and eating disorders. To measure the effectiveness of our educational presentation, a pre/posttest will be administered to assess increase in knowledge and awareness.

Results: Preliminary results showed that students increased their knowledge of the three most common eating disorders.

Conclusion: The project will bring awareness to college students on the media's influence on body image and eating disorders.
30) STRESS, HEALTH, AND DIET/PHYSICAL ACTIVITY AMONG CAREGIVERS FOR PERSONS WITH ALZHEIMER’S DISEASE AND PARKINSON’S DISEASE

Author(s) and affiliation: Victoria LaSala, MPH(c); Margaret L. Longacre, PhD Arcadia University

Background: The National Alliance for Caregiving (NAC) 2015 report showed approximately 13.9% of the population (33 million adults) provide unpaid care to an adult with a chronic condition, two common being Alzheimer’s disease (AD) and Parkinson’s disease (PD). Several studies show a link between caregiver stress and poorer health. However, a gap in the literature exists regarding how diet and physical activity choices are affected by the stress of caregiving, affecting caregiver health.

Objective: The research objective was to understand stress, health and nutrition/physical activity among PD and AD patient caregivers.

Design/Methods: A mixed method approach was utilized for the study. Secondary analyses compared demographic characteristics, stress levels, and physical health of AD and PD patient caregivers using the NAC 2015 publicly available data, which surveyed a nationally representative sample. Additional one-on-one interviews will give insight on diet and exercise choices and perceptions of stress, since such data was absent from the dataset and unable to be explored.

Results: Quantitative analyses of the weighted NAC data (n=190) showed 53.3% of AD and PD caregivers experience high emotional strain related to their role. 35% of AD and 23% of PD caregivers report worsening health since becoming carers. Qualitative interviews are in progress to explore stress and diet/physical activity among such caregivers.

Conclusion: Preliminary findings suggest that the stress of informal caregiving for AD and PD patients has an effect on health outcomes. Qualitative interviews will elucidate how/if this stress affects diet/physical activity choices.
A QUALITATIVE SYSTEMATIC REVIEW OF THE CONCUSSION-EMOTIONAL RESPONSE PARADIGM IN HIGH SCHOOL AND COLLEGE ATHLETES

Author(s) and affiliation: Gaurav Majmudar, BS, University of Pennsylvania; Jill Johnson, MPH, PhD, University of Pennsylvania; Evan Anderson, JD, PhD, University of Pennsylvania

Background: The estimated incidence of sports related concussion has increased from 300,000 in 2007 to over 1.6 million in 2017, with a large percentage occurring in youth athletes. There are growing concerns about the cognitive and emotional wellbeing of young athletes during concussion recovery.

Objective: To review research evaluating how concussion relates to changes in emotion and mood in high school and college athletes.

Design/Methods: Relevant articles from 1997-2017 were searched on PubMed using keywords such as: 1) “concussion” or “brain injuries, traumatic” or “TBI”, and 2) “high school” or “college” and, 3) “depression” or “affect” or “mood”. English language articles were included for analysis if they measured concussed high school or college athletes using a validated instrument for assessing emotion and mood.

Results: Ten published studies met the inclusion criteria. Five studies measured changes in emotional response in athletes after concussion. The other studies compared emotional response in athletes after concussion to the emotional response in athletes after non-concussive sports injury, such as musculoskeletal, or orthopaedic injury.

Conclusion: Despite heterogeneity in methods and limitations in the literature, our review suggests growing consensus that concussions result in altered emotions and mood. However, current research shows conflicting results on whether alterations in emotional response are different postconcussion than post non-concussive sports injury.
Author(s) and affiliation: Alicia Mangin, MPH (c), Arcadia University; Margaret L. Longacre, PhD, Arcadia University

Background: The proportion of older adults, 65 years or older, in the United States is expected to increase substantially in coming decades. There will be a need to better assess the mental health of this aging population as many older adults experience mental health disorders (more than one in seven). Currently, the health system often fails them with respect to diagnosis and treatment because older adults present with distinct risk and protective factors when compared to younger counterparts, including higher risk for loneliness and feelings of bereavement.

Objective: The purpose of this study is to evaluate health professionals’ perceptions of distress screening broadly and specifically for older adults, and perceived need for an age-specific distress screening tool.

Design/Methods: Data were collected via semi-structured, one-to-one qualitative interviews of health professionals, assessing perceptions of distress, distress screening policy, perceived self-efficacy to administer and barriers to utilizing this hypothetical tool and perceptions on its efficiency in older adults. 8-10 interviews will be conducted, transcribed and analyzed using qualitative, integrated coding analysis.

Results: To date, three interviews were conducted among health care professionals working with older adults in some capacity (ED, cancer, home health). Preliminary findings indicate that a distress screening tool for older adults, while it may face time and resource barriers, will have large benefits for detecting distress specific in older adults.

Conclusion: Understanding health care professionals’ perceptions and barriers will contribute to better processes and tools to assess distress among older adults and improve health outcomes.
33) OPTIMIZING PERFORMANCE THROUGH STRESS TRAINING: AN EDUCATIONAL STRATEGY FOR SURGICAL RESIDENTS

Author(s) and affiliation: Michael Mazzei MDa; Michael B. Goldberg MDa; Zoë Maher MDa; Joel H. Fish PhDb; Richard Milner BScc; Daohai Yu PhDd; Amy J. Goldberg MD FACSa
a Temple University Hospital, Department of Surgery, Parkinson Pavilion Suite 450, 3401, North Broad Street, Philadelphia, PA 19140, USA
b Center for Sport Psychology, Philadelphia, PA, USA
c Temple University Hospital, Institute for Clinical Simulation and Patient Safety, Philadelphia, PA, USA
d Department of Clinical Sciences, Temple Clinical Research Institute, Temple University Lewis Katz School of Medicine, Philadelphia, PA, USA

BACKGROUND: Uncontrolled stress is an epidemic among surgeons, with over half meeting criteria for burnout. This contributes to poor technical performance and high attrition rates. Stress management programs have been shown to improve efficacy and safety in aviation, military, and professional sports, but similar strategies have not been adopted in surgical training.

OBJECTIVE: The goal of this study was to evaluate the effectiveness of a stress management program for surgical residents.

DESIGN/METHODS: From 2011-2016, 137 surgical residents participated in a prospective, blinded study. The intervention group (n=65) underwent training in self-awareness, focus, relaxation, positive self-talk, visualization, and team building. The control group (n=72) did not. All participants subsequently completed a high-stress trauma simulation, requiring diagnosis and treatment of a life-threatening surgical problem. The study endpoints included measurements of physiologic and subjective anxiety, procedural efficiency, and perceived acute and chronic stress.

RESULTS: Both cohorts exhibited similar measures of physiologic and subjective anxiety after completing a high-stress simulation. However, residents who completed stress management training came to an accurate diagnosis 21% faster than controls (mean time to diagnosis: 2.2 vs. 2.8 min; p=0.04), and performed with significantly greater technical accuracy (mean OSAT scores: 9.4 vs. 8.9; p=0.03). Surgical residents who took part in stress training had subjective improvements in coping with acute and chronic stress.

CONCLUSIONS: Stress management education improves speed of accurate diagnosis and enhanced technical performance in surgical trainees during simulation and contributes to improved stress coping. This underscores the need for early and comprehensive stress training in surgical residency.
34) ORGAN DONATION AND DONOR REGISTRATION ATTITUDES, KNOWLEDGE, AND BEHAVIORS AMONG OLDER HISPANIC WOMEN AND HISPANIC COMMUNITY HEALTH WORKERS

Author(s) and affiliation: Mikala Moorech, Temple University; Chidera Agu, MPH, MSW, Temple University; Heather Traino, PhD, MPH, Temple University

Background: The need for organ donation in Hispanic communities continues to grow, but negative perceptions and misunderstandings of organ donation deter registration.

Objective: This study assessed available information, current opinions, and behaviors related to organ donation and donor registration among older (age 50+) Hispanic women, and Hispanic community health workers (i.e., Promotoras).

Design/Methods: Promotoras (n=30) and older Hispanic women (n=49) in Chicago, Philadelphia, and San Antonio, completed telephone surveys assessing organ donation and donor registration knowledge (12 items), behaviors, and attitudes (14 items) with lower scores indicating more negative beliefs.

Results: Hispanic women were significantly older (59.1 vs. 46.8), primarily from Mexico (75.5% vs. 46.7%), and spoke only or mostly Spanish (84.1% vs. 46.7%) compared to Promotoras. Nearly all respondents were female (98.7%). Although most Hispanic women (91.8% vs. 83.3%) had heard of donation, were somewhat, or strongly in favor of donation (75.5% vs. 83.3%), and had similar levels of knowledge (6.5 correct answers vs. 7.1 correct answers), compared to Promotoras, few were registered donors (36.7% vs. 56.7%); these differences were nonsignificant. Participants reported mean attitude scores of 50.8 (SD: 6.6), with a significant difference (48.1 vs. 54.6) between Hispanic women and Promotoras.

Conclusion: There is a need to improve perceptions of organ donation, and to facilitate donor registration behaviors among older Hispanic women. This study will inform the development of a Promotora-led intervention on donor registration.
35) CHINESE HEALTHCARE AND INTERCULTURAL PREMEDICAL ENGAGEMENT: CULTURAL COMPETENCE FOR FUTURE PHYSICIANS

Author(s) and affiliation: Nicolas Nelson, BAS, University of Pennsylvania; Xiaohong Witmer, PhD, University of Pennsylvania; Jackie McLaughlin, MS, University of Pennsylvania

Background: To offer quality care and promote access for minorities, physicians must understand the range of perspectives held by patients with different sociocultural backgrounds. This program was formed to train future physicians to acquire cultural competence by exploring different dimensions of Chinese healthcare provision.

Objective: The goal of this program is to educate and engage pre-health students in different aspects of Chinese healthcare, culture, and language. The mission is to produce more empathic, socially responsible, and articulate healthcare providers who are prepared to meet the needs of the nation’s diversifying population.

Design/Methods: Activities include 1) language–culture exchanges with students from China; 2) research presentations on topics of interest; 3) speaker events with experts from different domains; 4) workshops to understand health barriers; 5) service activities in the community; and 6) cultural immersion, including a planned two-week trip to healthcare facilities in Beijing and Changchun.

Results: Survey responses (n = 16) show that pre-health students are developing a better understanding of Chinese healthcare and culture, resolving misconceptions about certain topics while appreciating the foundations of others. Formal assessments of knowledge acquisition pending.

Conclusion: The program supports 16 modalities cited by a review of model frameworks used by healthcare systems to develop cultural competence, with 3–6 remaining modalities that may be feasible to incorporate. By May, we will have completed over 25 events, with more deliverables pending the China trip.
36) STATEWIDE LARC ACCESS PROJECT: IDENTIFICATION OF POSITIVE DEVIAN'T SITES

Author(s) and affiliation: Fatima Noorin, MPH(c), University of the Sciences

Background: Despite being the most effective, reversible, and cost effective contraceptive method, Long-Acting Reversible Contraceptives (LARC) are the third most commonly used method, after birth control pills (26%) and condoms (15%) in the U.S.

Objectives: 1) Assess the access and use of LARC among Title X Family Planning (FP) providers in the state of Pennsylvania; (2) Identify positive deviant Title X FP providers by rates of LARC uptake in client population.


Results: The total number of unique LARC users included in the data set was 17,667 (9% of all FP users within AccessMatters’ network). The total number of unique new LARC users based on the service dispensed at site was 4,979 (2.4% of all FP users) for both years. Approximately, 40% and 38% of all FP users in 2015 and 2016, respectively belonged to Planned Parenthood SEPA. The predominant LARC users were Black/African American (46%) and aged 25-29 years (29%). Hospital-based sites showed highest LARC usage (17%) and uptake (7%) rates for both years. Use of LARC among teenagers was low (12%). La Comunidad Hispana and St. Christopher’s Hospital for Children showed the highest percent increase in LARC uptake.

Conclusion: Access Matters intends to learn from the experiences of positive deviant sites to develop strategies to assist other FP providers. The identification of best practices at positive deviant sites and exchange of information has potential to increase the access and uptake of LARC at Title X FP sites. To utilize LARCs when preventing unintended teen pregnancies, factors such as social and economic concerns as well as benefits should be considered.
37) IMPACT OF CANNABIS USE ON POST STROKE OUTCOMES: INSIGHTS FROM THE NATIONWIDE INPATIENT SAMPLE (NIS) STUDY

Author(s) and affiliation: Rikinkumar Patel MD and Heather F. de Vries McClintock PhD MSPH MSW; Arcadia University

Background: Cannabis use increases the risk of stroke as it is associated with physiological mechanisms that exacerbate stroke prognosis such as increased cerebrovascular resistance.

Objective: To study relationship between cannabis use, inpatient stay, care utilization, and costs among stroke patients.

Design/Methods: We used Nationwide Inpatient Sample from year’s 2010–2014 and identified Stroke and Cannabis use disorder using ICD-9-CM codes. We used binomial logistic-regression model to generate adjusted odds ratios (aOR) and 95% Confidence Interval(CI) to assess inpatient outcomes.

Results: The study analyzed 36,001 inpatient stroke admissions in patients aged 12-35. Cannabis Users (CU) were more likely to present with dysphasia (aOR=1.988; 95% CI 1.352–2.923) and facial weakness (aOR=1.610; 95% CI 0.900–2.881). Higher proportion of CU (42.2% vs. 35.8%) were hospitalized >3 days (median) and had longer inpatient stays (aOR=1.1188; 95%CI 1.080–1.307) compared to non-CU-users. In addition, 51.3% CU had hospitalization charges >$30,692 (median) and higher inpatient charges (aOR=1.105; 95%CI 1.060–1.213). CU were more likely to utilize thrombolytic (aOR=1.363; 95%CI 1.153–1.611) and thrombectomy (aOR=2.150; 95%CI 1.540–3.003). Despite of utilization of advanced treatment modalities, the in-hospital mortality was higher in CU (1.6% vs. 1.5%; p-value= 0.044).

Conclusion: Our study contributes to evidence regarding the negative impact of cannabis use in stroke patients. Cannabis use is associated with prolonged inpatient stay, utilization of invasive treatment modalities, and increased healthcare cost and mortality. Further research is needed to support development of integrated-care models for early diagnosis and treatment of Cannabis use disorder to improve quality of healthcare.
38) Implementation Analysis of Mychoice an Mhealth Tool

Author(s) and affiliation: Rutu Patel, Temple University College of Public Health, Sarah Bass, PhD, Temple University Risk Communication Lab, Linda Fleisher, PhD, Children’s Hospital of Philadelphia Center for Injury Research and Prevention

Background: Minority patient participation in clinical trials is exceedingly low, negatively affecting patients and researchers. The key to understanding treatment efficacy among minority cancer patients that have disproportionately high morbidity and mortality rates is increasing minority participation in clinical trials.

Objective: By addressing barriers to minority participation, mhealth intervention Mychoice aims to change perception and increase clinical trial participation. This study establishes the challenges to an effective implementation of Mychoice in a healthcare setting and to record alterations and successes of the intervention process.

Design/Methods: Meeting notes (n=5) and observations during pre-implementation with the intervention site, were analyzed using thematic coding. Notes and observations were used to answer questions from the Consolidated Framework for Implementation Research (CFIR) data tool created by the research team.

Results: Results include challenges and findings presented during pre-implementation. Challenges included implementation plan changes, need for additional resources and new recruitment processes. Main findings were the awareness of other tools used to address clinical trials at the intervention sites, the adaptability of the intervention and changes from the original implementation plan to current plan. A modified implementation plan was developed from the results of the study will be implemented across sites.

Conclusion: Implementation is a vital part of an intervention that can positively or negatively affect the success of an intervention. Findings will provide context to the findings of the Mychoice clinical trial and allow for the research team to prevent challenges and barriers in future implementations who must weigh potential benefits and harms during study design and ethics review.
39) ADDRESSING INCREASING SUICIDE RATES AMONG COLLEGE STUDENTS: EXPLORING THE RELATIONSHIP BETWEEN REPORTED STRESS AND SOCIAL MEDIA USE

Author(s) and affiliation: Naomi Pilla, MPH (c); Katie DiSantis, PhD, MPH, Arcadia University

Background: College-aged individuals are increasingly presenting with mental health issues, including the most severe outcome, suicide, where a 24% increase in prevalence has been observed over the past 15 years. Millennials report the highest average stress level among all generations in US. As suicide and reported stress-level trends continue to increase, social media use also has increased. Recent studies have demonstrated the negative mental health outcomes associated with social media use, including depression, anxiety, stress, and isolation.

Objective: The purpose of this study is to address the increasing suicide rates by exploring the relationship between social media use and stress among undergraduates in the Philadelphia and greater-Philadelphia region.

Design/Methods: An online survey will be sent to students at two four-year college institutions in a large metropolitan area. The survey consists of likert scale and forced response. Independent variables measured include sex, social media, frequency of social media use, attitude towards social media use, the Perceived Stress Scale (PSS), reported stress symptoms, and use and attitude towards mental health services on and off campus.

Results: Data collection for the online survey will be completed in March 2017. Data analysis will analyze the relationship between frequency of social media use, attitudes towards social media use, and PSS, reported stress symptoms, use and attitude towards mental health services on and off campus.

Conclusion: If high use of social media correlates to higher stress levels, the findings will support offering college-aged populations guidance on the mental health impacts of social media use.
UNDERSTANDING RACIAL DISPARITIES IN PATIENTS’ ADHERENCE TO ANALGESICS PRESCRIBED FOR CANCER RELATED PAIN: AN ASSESSMENT OF COMMUNICATION-RELATED BARRIERS TO PAIN MANAGEMENT

Author(s) and affiliation: Ryan Quinn, MPH (c), Temple University

Background: Racial disparities have been identified among patients’ rates of adherence to analgesics prescribed for cancer pain. Patient-clinician communication has been effective in improving medication adherence rates.

Objective: To better understand how racial disparities in adherence relate to communication, racial disparities among patients’ communication-related barriers to pain management were assessed. Relationships between race, communication barriers, and adherence were also assessed.

Design/Methods: A secondary data analysis was conducted, using data from a longitudinal cross-sectional study which aimed to assess racial differences in outpatients’ adherence to medication prescribed for cancer related pain. Participants (n=201) were either African American or White. Adherence was measured for three months using a medication bottle that electronically records medication use. Communication barriers were measured using the Barriers Questionnaire-II. T-tests were used to assess racial disparities among individual communication-related barriers to pain management. Linear regression was used to assess whether race and communication barriers aggregate scores were predictors of adherence.

Results: African Americans, compared to Whites, reported significantly higher amounts of the following barriers: It is important to be strong by not talking about pain (p=0.030) and It is important for the doctor to focus on curing illness, and not waste time controlling pain (p=0.006). Race was found to be a significant predictor of adherence, while communication barriers score was not.

Conclusion: The present analysis identifies racial disparities among communication barriers, and provides evidence of racial disparities among outpatients’ rates of adherence to medication prescribed for cancer related pain. It fails to provide evidence that communication barriers are significantly associated with adherence.
EXPLORING THE CAPACITY FOR TRAUMA-INFORMED CARE AMONG BEHAVIORAL HEALTH ORGANIZATIONS IN LANCASTER COUNTY

Author(s) and affiliation: Julia Ressler, BSW, Temple University

Background: Existing literature reveals the importance of trauma-informed approaches in behavioral health services. As primary care providers increasingly screen for depression and intimate partner violence, demand is growing for trauma-informed behavioral health providers for referrals. Anecdotal evidence shows limited capacity for trauma-informed care among behavioral health organizations in Lancaster County. To date, there has been no standardized assessment of trauma-informed care in this community.

Objective: This paper aims to explore the development of an organizational assessment tool and discuss the current level of trauma-informed care capacity among behavioral health organizations.

Design/Methods: All behavioral health organizations (N=25) in the Let’s Talk, Lancaster coalition were asked to complete a self-administered questionnaire. This tool assessed the organizational setting and the level to which they have implemented trauma-informed policies, practices, and procedures.

Results: Behavioral health organizations (N=6) reported an average score of 54.8 out of a maximum 100 on the scale of trauma-informed care, ranging from 32 to 87. For all organizations, the most commonly reported barrier to further implementation is funding. Emerging themes indicate a need for standardized expectations and coordinated technical assistance in the planning and implementation of trauma-informed policies, practices, and staff training.

Conclusion: This exploratory study indicates that behavioral health organizations in Lancaster County currently have a wide range of capacity for trauma-informed care. This may serve as a measure for future benchmarking in program development, implementation, and evaluation.
42) BATTERER INTERVENTION PROGRAMS: WHAT ARE WE DOING? A COMPARATIVE CASE STUDY ANALYSIS

Author(s) and affiliation: Chelsea Ripley MPH(c) Arcadia University, Andrea Crivelli-Kovach PhD, MA, MCHES Arcadia University

Background: Intimate Partner Violence is a problem in every community and affects all people. Batterer Intervention Programs are a promising method for treating domestic violence offenders. These programs are designed to educate and rehabilitate offenders, while requiring accountability for their behaviors. However, there are no standards defining program components or implementation and little evaluation has been conducted to date. Additionally, research has shown high levels of recidivism and low program effectiveness.

Objectives: The purpose of this project was to (a) identify and describe the structure, theories, methods, elements, and intervention components used in select batterer intervention programs, and (b) compare and contrast existing programs with recommendations from the 2009 Experts Roundtable on Batterer Intervention Programs.

Design/Methods: Existing programs were identified through google searches. Direct contact was made with program facilitators or directors to request an interview. Interviews were conducted and a comparative case analysis was completed to compare and contrast programs with each other and with the Experts Roundtable recommendations to see which elements are most used.

Results: Four qualitative interviews were conducted across three states (California, Minnesota, and Pennsylvania). While most programs are following some recommendations, contextual factors such as geographic location, type of program, state regulations, and lack of information and resources influence the degree to which programs implement the recommendations.

Conclusion: There are many challenges to improving the field of batterer intervention programs. To make progress programs need standardization, further research, access to more resources including training and education, and strong ties to other community organizations and services.
DEVELOPING A TEEN DATING VIOLENCE PREVENTION PROGRAM WITH A PEER EDUCATION MODEL

Author(s) & Affiliation: Brittany Robinson, BA, Temple University; Brenda Shelton-Dunston, MPH, Black Women’s Health Alliance; Anne Frankel, PhD, Temple University

Background: Philadelphia, Pennsylvania has higher rates of teen dating violence than the national average. Teen dating violence prevention programs are imperative in reaching the goal of reduced rates of intimate partner violence in the United States and Philadelphia. Peer education has been shown to create greater attitude changes in adolescents than education programs led by adults. Peers view peer educators as a more credible and accessible source of information than adults.

Objective: The purpose of this study is to investigate the benefits and barriers of peer education and apply those results to a new peer educator training curriculum to be used in Philadelphia.

Design/Methods: Five peer educators participated in qualitative interviews to assess training/education, skill development, benefits, barriers, and effectiveness of peer education. Emergent themes were observed and compared for consistency.

Results: All interview participants agreed that it is necessary to have a peer education class and examination to properly train peer educators. Some challenges of peer education include recruitment of participants into the peer facilitated program and the high standards that peer educators feel they must maintain at all times. However, peer educators recognize that peer education can be a great benefit to communication skills, interpersonal skills, and raising awareness and knowledge about important topics in health.

Conclusion: Research suggests that benefits of peer education outweigh the barriers. Training and education are key in developing knowledgeable peer educators.
44) ASSESSMENT OF THE EFFECT OF CORNER STORE NUTRITION EDUCATION ON THE KNOWLEDGE, INTENT AND EATING BEHAVIOR OF CORNER STORE CUSTOMERS IN LOW-INCOME NEIGHBORHOODS IN PHILADELPHIA, PA

Author(s) and affiliation: Katherine Rodriguez, MPH, Temple University; Yi-Ming Law, The Food Trust

Background: Low-income adults who live in urban cities like Philadelphia, PA, have little to no access to healthy food, are disproportionately affected by diabetes and high blood pressure (HBP), and consume a significant portion of daily calories from energy-dense and nutrient-poor foods purchased at local corner stores.

Objective: The purpose of this project was to assess the effect of corner store-based nutrition lessons and free health screenings on corner store customers.

Design/Methods: Participants (n=716) completed post-lesson surveys. Another set of participants (n=44) completed an additional survey developed to determine behavior change at health screening stores. Analyses include chi-square tests for independence between number of lessons, and knowledge, perception and intention to eat healthily, and a logistic regression to test the relationship between perception and behavior.

Result: Health screening data showed that 58.2% of the population (n=634) had pre-hypertension or HBP, and 67.7% were either overweight or obese. Significant differences were observed for repeat participants versus first time participants. Repeat participants had higher knowledge of healthy food (p < 0.001), greater intention to buy healthy foods (p < 0.001), and a higher perception of access to healthy foods (p=0.027). Additionally, a significant association was observed between intention to make healthy meals and having children in the household.

Conclusion: This report adds to evidence that access to a nutrition educator in urban communities has a direct impact on the eating behavior of corner store customers. Future results of the behavior change survey will be cross-referenced with health screening results to determine impact on population-level obesity and HBP.
45) THE USE OF MHEALTH FOR SELF-MANAGEMENT OF CARDIOVASCULAR DISEASE IN OLDER ADULTS TO FACILITATE AGING IN PLACE

Author(s) and affiliation: Shannon Rose, MPH (c); Katie DiSantis, PhD, MPH Arcadia University

Background: Mobile health has recently been implemented as a complementary tool to cardiac rehabilitation. Mobile health empowers individuals to assume a more active role in the self-management of cardiovascular disease. Self-management behaviors, such as physical activity, improving nutrition, and smoking cessation, are considered primary metrics for managing the effects of cardiovascular disease, yet long-term behavior changes are often difficult to achieve. Through the use of smartphones, wearable sensors, and telemonitoring devices, mobile health has significant potential to improve self-management of cardiovascular disease.

Objective: The purpose of this study is to explore optimal methods of mobile health that promote self-management and initiate behavior change in older adults with cardiovascular disease to facilitate decreased hospitalization and increase quality of life.

Design/Methods: A systematic literature review was used to extract articles from two databases (Pubmed, EBSCO). The quality of evidence collected was assessed using Oxford University Centre for Evidence Based Medicine’s level of evidence and through a narrative review.

Results: The systematic review resulted in 10 original research studies that met the inclusion and exclusion criteria. Most studies support the effectiveness of mobile health for self-management of at least one cardiovascular metric as well as secondary outcomes including decreased hospitalization, cost savings, and patient satisfaction.

Conclusion: The review reveals overall support of mobile health for cardiovascular disease self-management in older adults as well as the limitations of current mobile health interventions to sustain long-term behavior change.
46) DEADLY DIARRHEA: WHERE THE WIN BEGINS!

**Author(s) and affiliation:** Ashley Russell, MPH(c), University of the Sciences

**Background:** Each one of the 39.4 million people that are hospitalized each year hope that they will go home healthier than they arrived. Due to Hospital-acquired infections (HAI), this is not true for one in 25 people. The bacteria Clostridium difficile (CDI) accounts for about 500,000 cases each year. CDI is known to cause inflammation of the colon with symptoms such as: watery diarrhea, fever, loss of appetite, nausea and abdominal pain/tenderness. The severe diarrhea can lead to death, causing 15,000 deaths each year. Hospital costs to treat each event of CDI directly are $5,682-$9,124.

**Objective:** This project examined what characteristics were risk factors for CDI, like specific health conditions or antibiotic usage.

**Design/Methods:** A case-control study was conducted for a small community hospital to determine which conditions and medications put patients at a higher risk for developing CDI. A total of 115 patients were used in the study; 20 case patients and 95 control patients. Odds ratios were calculated and analyzed to determine what put patients at a higher risk.

**Results:** Patients with CDI are 3.4 times more likely to have taken Vancomycin, administered intravenously; 13.14 times more likely to have a multiple-drug resistant organism and 2.83 times more likely to have a urinary tract infection.

**Conclusions:** Vancomycin, given intravenously, could increase risk for CDI; therefore other viable options should be explored. Patients with multidrug resistant organisms and urinary tract infections need to be monitored more carefully for CDI infections. Since this hospital had a very low occurrence of CDI, it’s current policies and practices seem to be effective and should be considered for adoption in other small hospitals.
PROVIDER PERSPECTIVES ON THE CLINICAL RELEVANCE OF PATIENT SEXUAL ORIENTATION AND GENDER IDENTITY (SO/GI): AN EXPLORATORY QUALITATIVE STUDY

Author(s) and affiliation: Kathryn L. Scheffey, MSW, LSW; Melissa E. Dichter, PhD, MSW; Shannon N. Ogden, MPH; University of Pennsylvania

Background: Gender and sexual minority populations face numerous physical and mental health disparities and have higher rates of unmet health needs compared with heterosexual and cisgender populations. The federal government has recommended that healthcare institutions document patient SO/GI in order to track and combat existing health disparities. Little is known, however, about how providers might use this information in their clinical care.

Objective: To explore providers’ perspectives on the ways in which knowledge of a patient’s SO/GI may impact clinical care.

Design/Methods: Qualitative in-depth interviews were conducted with 25 healthcare providers (family medicine, internal medicine, gynecology, and urology) within a single healthcare system. Interviews were recorded and transcribed verbatim. Transcripts were coded and principles of grounded theory and thematic analysis employed to identify themes emerging from the data.

Results: Providers recognized the importance of tracking patient SO/GI data for understanding population-level public health concerns, as well as the relationship benefits of understanding and respecting the context of patients’ lives. However, providers emphasized the importance of knowing patients’ sexual behaviors and physical anatomy for addressing health risk and preventive care needs – and noted that these are not necessarily indicated by patient SO/GI. Providers described ways in which their assumptions from the collection and documentation of patient SO/GI may unintentionally obscure accurate profiles of patient behavior and anatomy.

Conclusions: Along with potential benefits of routine collection of patient SO/GI, it is important that providers continue to assess for individual risk and need as clinically appropriate without making assumptions based on SO/GI labels.
48) CRIMINAL JUSTICE CONTACT PRIOR TO FATAL OVERDOSE: IDENTIFYING OPPORTUNITIES FOR INTERVENTION

Author(s) and affiliation: Ruth Shefner, MSW, MPH(c); Jason Sloan, JD(c), MPH(c), Evan Anderson, JD, PHD

Background: Fatal overdoses have increased dramatically in Philadelphia and across the United States. The causes of this epidemic are complex. It is clear, however, that intervening earlier in the course of opioid abuse is important for preventing deaths and reducing harm. But identifying early intervention opportunities is difficult. There is an established relationship between opioid abuse and contact with the Criminal Justice System, yet no research has explored whether these contacts can illuminate early intervention strategies.

Objective: To describe the number, timing, and type of interactions with the Criminal Justice System among individuals who subsequently fatally overdosed to enhance understanding about how the Philadelphia Criminal Justice System can address substance abuse and associated harms.

Design/Methods: Names and birthdates of all individuals who fatally overdosed in 2016 were obtained from the Philadelphia Medical Examiner’s Office. Criminal histories were obtained from the District Attorney’s Office and abstracted from records by study authors. Collected data included: dates of arrest and convictions, specific criminal charges, types/duration of sanctions, and program participation/completion.

Results: Contacts with the criminal justice system were common. The patterns of these contacts reveal a number of criminological trends among subjects, demonstrating common pathways through substance use and the criminal justice system in Philadelphia including homelessness, transitions in substance use, and participation in the drug market economy.

Conclusion: The Criminal Justice System provides a rich source of data related to opioid abuse. This data may enable criminal justice processes that facilitate better and earlier interventions to reduce preventable opioid-related harm.
MECHANISMS FOR INCREASING UTILIZATION OF MINDFULNESS PROGRAMS ON A COLLEGE CAMPUS

Author(s) and affiliation: Jasmine Silvestri, MPH, The University of Pennsylvania; Dominique Ruggieri, PhD, The University of Pennsylvania; Marian Reiff, PhD, The University of Pennsylvania; Unmesha Roy Paladhi, BS, The University of Pennsylvania

Background: University students identify stress as the most common factor affecting their academics. In recent decades, the traditional practice of mindfulness has gained popularity among mental health professionals as a tool to promote well-being, decrease stress, and treat mental health conditions. The University of Pennsylvania offers numerous mindfulness programs through Counseling and Psychological Services (CAPS) and other departments, yet student utilization remains relatively low across both undergraduate and graduate populations.

Objective: To understand students’ needs and perceptions of mindfulness offerings on campus in order to promote and increase utilization of these programs at CAPS and beyond.

Design/Methods: Semi-structured interviews were conducted with 10 mindfulness program users and 13 mindfulness program non-users to explore students’ perceptions of stress and stress management, mindfulness, and mindfulness programs on campus.

Results: In our preliminary findings, both users and non-users of mindfulness programs indicated that mindfulness practice can foster positive changes in a person’s life such as lower stress levels. Students also noted that CAPS should consider the greater issue of mental health as it relates to campus culture when trying to promote mindfulness practices for students. Students suggested specific promotion techniques to increase awareness and utilization of mindfulness programs on campus, including the use of personal narratives, social media, and forging student partnerships.

Conclusion: These findings suggest that a marketing campaign using messaging from students via social media platforms highlighting the positive impacts of mindfulness through personal narrative has the potential to increase student utilization of these services on campus for others.
50) EFFECT OF A GROUP EXERCISE CLASS ON PERCEIVED FALL RISK AND FEAR OF FALLING IN OLDER ADULTS WITH PARKINSON’S DISEASE

Author(s) and affiliation: Carolyn Ticker, DPT (c)/MPH (c); Katie Disantis, PhD, MPH; Janet Readinger, PT, DPT; Arcadia University

Background: Every year, approximately 30% of older adults aged sixty-five and older fall, often leading to nonfatal and fatal injuries. A person’s risk of falling is influenced by numerous factors, including having a progressive neurological disease, such as Parkinson’s (PD). Evidence suggests that exercise and physical activity can improve reduce falls in this population, but less is known about the impact on perceived fall risk and fear of falling.

Objective: To explore how a bi-weekly group exercise class for people with PD influences participants’ perceived fall risk and fear of falling.

Design/Methods: Participants of the StayFit exercise program, a group exercise class for people with PD, were recruited to take part in this study consisting of a one-time, 45-minute interview. The interview consisted of 12 questions related to the participant’s experience with Parkinson’s, perceived risk of falling, motivation for attending the StayFit program, and its perceived effect on his or her daily life. At the conclusion of the interview, participants were given the Activities-Specific Balance Confidence Scale (ABC Scale), an outcome tool commonly used to assess balance self-efficacy.

Results: Seven StayFit participants completed interviews during the month of February. Interviews were transcribed and conventional content analysis will be performed to assess common themes. Total ABC Scale scores will be assessed for correlation with participants perceived risk of falling.

Conclusion: If qualitative themes support the notion that exercise improves fall risk perceptions and reduces fear of falling, it will encourage StayFit to evaluate fall-risk outcomes in future participants.
51) “SAY WHAT YOU MEAN TO SAY”: UNPACKING THE COMPLEXITIES OF COMMUNICATION BETWEEN PATIENTS AND THEIR PROVIDERS

Author(s) and affiliation: Katelynn Timony, Arcadia University

Background: Communication is a process where the sending, receiving, construction and interpretation of messages are influenced by participants’ experiences, culture, values, knowledge and attitudes. Disruptions in the flow of verbal and nonverbal messages stem from diverse factors and lead to communication breakdown, leaving both sides frustrated and at odds. Effective communication within the patient-provider relationship is linked to increased diagnostic accuracy, patient adherence to medication and treatment regimens, patient satisfaction, and improved overall clinical outcomes, but its relationship to patient activation and empowerment has not been thoroughly investigated.

Objective: The purpose is to a) explore the dynamics of patient provider communication within the transition from paternalistic to patient-centered medical practice, and b) propose a new model of medical training to enhance communication within the patient-provider dyad.

Designs/Methods: A comparative literature review was conducted to explore external factors (current standards of medical education and cultural competency training) impacting patient-provider communication. A concept map was developed to depict relationships between the respective biomedical and psychosocial approaches, including each side’s contrasting, non-communicated expectations.

Results: Key influences on provider communication practices include the effects of biomedical and non-standardized communication skills training (burnout, depersonalization), cultural competency and service learning experiences. Patient communication practices are influenced by psychosocial concerns, health and technology literacy, and the perception of being “heard”.

Conclusion: Realizing a patient-centered medical model supporting activation and empowerment means affording providers the personal and professional resources (standardized and evidence-based communication training programs, humanizing education and residency experiences, robust community outreach infrastructure) needed to meet patients more than just halfway.
52) UNDERSTANDING FOOD INSECURITY AMONG AMERICAN ADULTS WITH A CANCER DIAGNOSIS

Author(s) and affiliation: Marsha L Trego, MPH(c); Margaret L Longacre, PhD Arcadia University

Background: Health during and after cancer treatment is intrinsically linked to diet yet meeting nutritional recommendations may be particularly challenging given the financial impact of cancer care. Thus, food insecurity may be a concern for cancer survivors.

Objective: The purpose of this study was to investigate the prevalence and characteristics of food insecurity among a nationally representative sample of American adults with a cancer diagnosis.

Design/Methods: This study used data from 2011-2014 NHANES to analyze food insecurity among a subpopulation of adults who reported a past diagnosis of cancer (n=911). Binary food insecurity was measured by the adult US Household Food Security Survey Module. Four-year survey weights were applied. Descriptive statistics and chi-square tests were performed to determine characteristics of food insecurity among those with a cancer diagnosis.

Results: People with a history of cancer had a lower prevalence of food insecurity compared to those who had never had a cancer diagnosis (8%, 16%; p<0.0001). Yet, there was significant variation in food insecurity by cancer type, with 20% of survivors of female reproductive cancer being food insecure. Additional variables associated with food insecurity among cancer survivors included gender, age, ethnicity, annual income, and education.

Conclusion: Despite a lower prevalence of food insecurity, a portion of cancer survivors experience food insecurity. Variation in food insecurity by cancer type and sociodemographic characteristics points to possible areas of further investigation given nutritional guidelines during treatment and into survivorship.
53) PARENTING WHILE GRIEVING THE LOSS OF A SPOUSE

Author(s) and affiliation: Christine Vincent, MPH (c), Andrea Crivelli-Kovach, PhD, MA, Arcadia University

Background: Parenting effectively can be challenging after a loss, consequently leading to negative outcomes for children. Effective parenting is among the most important predictors of children’s adjustment to loss. There is a need for evidenced based parenting programs for grieving parents. The present study was undertaken to add to the limited literature on parenting programs for bereaved parents.

Objective: The purpose of the present study was to (a) explore the unique challenges of parenting children after the loss of a spouse, (b) the perceived usefulness of existing parenting programs topics and format for bereaved parents, and (c) recommend a new model of parenting program tailored for grieving parents.

Design/Methods: An exploratory qualitative study design was used in this study. Interviews were conducted with parents currently participating in a grief support group. Information on the study was given to the parents who were able to contact the researchers to participate. Interview transcripts were analyzed using a defined group of categories related to grief and parenting after the loss of a spouse. From these categories, common themes were identified from the interviews.

Results: Interviews are currently underway and analysis of the transcripts will be completed by mid-April. Themes such as the challenges of parenting will be presented by category and subthemes.

Conclusion: Creating parenting programs for bereaved parents is important in mitigating the effects of parental loss on children. These interviews may be used to aid in creating such programs.
COST-EFFECTIVENESS ANALYSIS APPLIED TO A HIV/STD PREVENTION PROGRAM AT A LOCAL HEALTH DEPARTMENT

Author(s) and affiliation: Craig Walt, MPH(c), Monica Kruger, MPH, Barbara Kovacs, MPA, Matthew Howie, MD

Background: Cost-effectiveness analysis (CEA) compares costs and effects of two or more health interventions with the same goal(s). CEA facilitates decision-making and goal setting for improving program cost-effectiveness (CE).

Objectives: This study applies CEA at a local health department (LHD) to determine cost-effectiveness (CE) of new/expanded HIV/STD intervention models in comparison to 2017 program data. CEA is applied to determine cost per diagnosis, cost per averted transmission, direct medical costs saved, and incremental cost-effectiveness ratios (ICER) for current and prospective HIV/STD prevention activities.

Design/Methods: CEA was conducted with 2017 HIV/STD program data to determine baseline CE ratios. Costs and effects of various models (DIS/CHN, walk-in clinic, PrEP) were projected and compared to 2017 data to determine the ICER. Outcomes of interest are averted transmissions of HIV and STDs.

Results: Cost per new HIV diagnosis was as low as $7052 up to $55,867 with cost per averted HIV transmission between $26,531 and $42,640. HIV-related direct medical costs saved were in between $69,562 and $1,460,747. HIV ICER values ranged from -$3449 to $55,909. Cost per new STD diagnosis was as low as $219 up to $791 with cost per averted STD transmission between $439 and $1581. STD-related direct medical costs saved were in between $13,049 and $48,338. STD ICER values ranged from -$1300 to $3706.

Conclusion: CEA findings support delivery of a comprehensive program; a core DIS/CHN model with walk-in clinic and educational/awareness-raising components. PrEP is cost-effective, but currently not feasible due to budget constraints. This study demonstrates application of CEA in the context of a LHD.
CHARACTERISTICS OF NEWLY LICENSED ADOLESCENT CELLPHONE USE WHILE DRIVING

Author(s) and affiliation: Kristen Ward, MPH (c), University of Pennsylvania; Vicky Tam, MA, University of Pennsylvania, Children’s Hospital of Philadelphia; Yanlan Huang, MS, University of Pennsylvania; Douglas J. Wiebe, PhD, University of Pennsylvania; M. Kit Delgado, MD, MS, University of Pennsylvania; Catherine C. McDonald, PhD, RN, FAAN, University of Pennsylvania, Children’s Hospital of Philadelphia

Background: Cell phones are a major source of distracted driving and contribute to adolescent crash risk, yet few studies have observed the characteristics of teens phone use while driving.

Objectives: To describe speed, time of day, and roadway characteristics of newly licensed adolescent cellphone use while driving.

Design/Methods: New licensed adolescents in Pennsylvania installed a windshield-mounted device that paired with a smartphone application to collect data on cellphone use while driving over a two-week period. Descriptive statistics and GIS spatial analyses were used to characterize handheld cell phone use (“unlocks”) by speed, time of day, and roadway factors.

Results: The analytic sample included 16 adolescents (50% male), age 16.95 years (standard deviation: 0.36), licensed for 39.69 days (sd: 24.02). The sample drove 5624 miles in 705 trips across 39 counties (7 states). There were 964 “unlocks” while driving (1.23 unlocks per trip). The mean speed at unlock was 25.00 mph (sd: 16.63). Across the adolescents, mean highest speed at unlock was 53.33 mph (sd: 19.68). There were 210 unlocks between 8 pm-5 am (21.78%) and 33 between 11pm-5 am (3.42%). Results of our forthcoming analyses will describe frequency of unlocks that occur above the speed limit, near intersections, and on high traffic roadways.

Conclusion: Data from a smartphone app paired with an in-vehicle device indicate frequent engagement in hand-held cell phone use while driving in a sample of newly licensed adolescent drivers. In-vehicle monitoring devices should be used in large diverse populations to further understand adolescent phone use while driving.
56) THE ROLE OF PATIENT-PROVIDER-COMMUNICATION AND SELF-EFFICACY ON GLYCEMIC CONTROL IN PATIENTS WITH TYPE 2 DIABETES

Author(s) and affiliation: Taylor White-Welchen, BS, University of Pennsylvania; Robin Stevens, PhD, MPH, University of Pennsylvania

Background: Diabetes and poor glycemic control disproportionately affect vulnerable populations in the United States. The prevalence of diabetes and the proportion of diabetics with poor glycemic control among non-Hispanic/Blacks is nearly double that of non-Hispanic/Whites. Previous literature has identified patient-provider communication and self-efficacy as key indicators of glycemic control.

Objective: The aim of this study was to assess the relationship between patient-provider communication, self-efficacy and glycemic control in patients with type 2 diabetes at a federally qualified health center (FQHC).

Design/Methods: In this cross-sectional study, patients with type 2 diabetes from Charles Drew Health Center were recruited between October and December 2017. Participants completed two brief telephone surveys — the Interpersonal Process of Care survey-18 a validated questionnaire analyzing the patient-provider relationship, and the Diabetes Empowerment Scale-Short Form, a validated questionnaire analyzing diabetes-specific self-efficacy. Electronic health records were also reviewed. Descriptive statistics, one-way and multivariate analysis of variance tests were calculated.

Results: The study population included 31 patients; most were female (64%), non-Hispanic/Black (94%), and had at least a high school education (84%). Five (16%) patients had poor glycemic control, defined as having a HbA1c > 9%. Most patients were satisfied with provider communication (mean = 4.47 out of 5). Our findings suggest a positive relationship between patient-provider communication and glycemic control.

Conclusion: This study adds to the scientific knowledge that patient-provider communication is associated with diabetes outcomes. Though limited by the sample size and cross-sectional design, these findings support additional research to better understand this relationship within vulnerable populations.
AN OASIS OR A MIRAGE: AN ANALYSIS OF THE IMPACT OF DECREASING FOOD DESERTS ON OBESITY PREVALENCE IN PHILADELPHIA FROM 2010-2012

Author(s) and affiliation: Melissa Yoon and Heather F. de Vries McClintock PhD MSPH MSW Arcadia University

Background: Early studies linked food deserts to higher rates of obesity. Healthy food financing programs were implemented nationwide as the solution. In 2013, it was summarized that food deserts were decreased by 17%. It did not, however, consider obesity, which would provide insight as to whether these efforts improved the health of Philadelphia residents.

Objective: To descriptively evaluate whether an increase in food access was related to decreases in obesity rates and to identify demographic predictors of changes in obesity prevalence within Philadelphia.

Design/Method: A comparative analysis was conducted to determine the effect of reducing food deserts on obesity rates in Philadelphia from 2010-2012 was related to indicators of social affluence (SA), neighborhood advantage (NA), and residence stability (RS) as assessed by 2010 census data.

Results: For neighborhoods with reduced low access and increased obesity, indicators of SA, NA, and RS may explain the rise in obesity. Some of the lowest indicators of SA (female-headed households and income below poverty levels) and RS (owner-occupied housing units) were present within these districts. Planning districts that showed reduced low access and reduced obesity had some of the highest indicators of SA (female-headed households, unemployed, receiving foods stamps/SNAP) and RS (owner-occupied housing units).

Conclusion: Increasing access to healthy food does not guarantee a decrease in obesity. The rise in obesity in planning districts, despite reduced low access, highlights a need for alternatives to healthy food financing initiatives in addressing poor dietary intake and obesity.