



*Charles R. Drew University of
Medicine and Science*

*Medical Student Research
Colloquium
Current Research in Health
Disparity*

Class of 2021

February 26, 2021

AGENDA

8:30 a. m. *Call to Order*

Shahrzad Bazargan-Hejazi, PhD

Chair, CDU/UCLA Medical Student Research Thesis Program (MSRTP)

8:40 a. m. *University Welcome*

David Carlisle, MD, PhD

President, Charles R. Drew University of Medicine and Science

8:45 a. m. *The Provost's Welcome*

Steve Michael, PhD

Provost, Charles R. Drew University of Medicine and Science

8:50 a. m. *The Dean's Welcome*

Deborah Prothrow-Stith, MD

Dean, College of Medicine, Charles R. Drew University of Medicine and Science

8:55 a. m. *Introduction of Moderators and Judges*

Shahrzad Bazargan-Hejazi, PhD

9:00 – 10:50 a. m. *Student Presentations*

10:50 – 11:00 a. m. *Morning Break*

11:00 – 12:25 p. m. *Student Presentations (Morning Session, cont.)*

12:25 – 1:00 p. m. *Lunch Break*

1:00 – 2:30 p. m. *Afternoon Session*

2:30 – 2:40 p. m. *Afternoon Break*

2:40 – 3:25 p. m. *Student Presentations (Afternoon Session, cont.)*

3:25 – 3:30 p. m. *Closing Remarks*

Shahrzad Bazargan-Hejazi, PhD

Moderators of Student Presentations



Shanika A. Boyce, MD

Dr. Boyce is a pediatrician, an Assistant Professor at Charles R. Drew University of Medicine and Science, and the Co-Director for the Longitudinal Primary Care Clerkship. She received her medical degree from the CDU-UCLA Medical Education Program, and completed her Pediatric Residency Training at Harbor-UCLA Medical Center in 2014. Following her residency training, she returned to CDU as a faculty member and recently received a dual appointment as Assistant Clinical Professor in the Department of Pediatrics at the David Geffen School of Medicine. She practices clinically at Kaiser Permanente, per diem.



Stanley Hsia, MD

Dr. Hsia is an Associate Professor of Medicine at Charles R. Drew University of Medicine and Science and a Health Sciences Associate Clinical Professor at the David Geffen School of Medicine at UCLA. He has served as a program director for residents and endocrinology fellows, and as a clerkship director for CDU/UCLA medical students. Dr. Hsia has been conducting clinical research for the past 15 years, including both industry and investigator-initiated trials, funded by the National Institutes of Health and the American Diabetes Association.



Gerardo Moreno, MD

Dr. Gerardo Moreno is an Associate Professor in Family Medicine and the Director of UCLA PRIME-LA (Program in Medical Education). He received his medical degree from University of California, Los Angeles and completed his post-doctoral clinical residency training in Family Medicine at University of California, San Francisco. He received a Master of Science in Health Services from UCLA School of Public Health and completed a post-doctoral research fellowship in the Robert Wood Johnson (RWJ) Foundation Clinical Scholars Program at UCLA.

Faculty Judges



Marco Angulo, MD

Dr. Marco Angulo is a core faculty member of AltaMed's Family Medicine Residency Program. Dr. Marco Angulo graduated from the University of California, Berkeley, with a degree in Chicano Studies. He entered medical school at University of California, Irvine (UCI), and participated in the Program in Medical Education for the Latino Community (PRIME-LC), which was created to develop physician leaders to address health disparities in the United States and beyond. Dr. Angulo stayed on as a faculty member at the UCI Family Medicine Department, where he served as the Director of Diversity and Inclusion for the medical school and as the Director of the PRIME-LC Residency Program.



Michele A. Basso, PhD

Dr. Basso is a Professor in the Department of Psychiatry and Bio behavioral Sciences and Department of Neurobiology at DGSOM and Director of the Fuster Laboratory of Cognitive Neuroscience. The laboratory conducts research focusing on basic questions of science that may have direct clinical impact on the treatment of certain diseases, including Parkinson's. One of her current research projects examines the role of the basal ganglia and the superior colliculus in saccadic (quick and simultaneous) eye movement decision-making.



Arleen Brown, M.D., Ph.D.

Dr. Arleen F. Brown is a general internist and health services researcher, at the Department of Internal Medicine, UCLA. Her research focuses on health care system, social, and individual level determinants of health for persons with diabetes. She had headed a project, funded by the Robert Wood Johnson Foundation, on quality of care for older persons with diabetes in fee-for-service and managed Medicare. Dr. Brown was also a co-Principal investigator of a study funded by the Centers for Disease Control and Prevention to examine the quality of diabetes care for persons with diabetes in managed care.



Christian de Virgilio, MD

Dr. De Virgilio is originally from Argentina and moved to the U.S. as a child. He attended Loyola Marymount University as an undergraduate and University of California, Los Angeles for medical school. He completed his general surgery residency at Harbor-UCLA and a vascular surgery fellowship at the Mayo Clinic. He is currently Chair of the Department of Surgery at Harbor-UCLA and Co-Chair of the College of Applied Anatomy at the UCLA School of Medicine. He particularly enjoys teaching and mentoring medical students and residents.



Steven L. Lee, MD, FACS, FAAP

Dr. Lee is currently the Surgeon-in-Chief of UCLA Mattel Children's Hospital, chief of the Division of Pediatric Surgery at UCLA, and a Professor of Surgery and Pediatrics at the UCLA DGSOM. He attended UCLA as an undergraduate and received his MD at UC Davis. Dr. Lee completed his General Surgery training at UC Davis and Pediatric Surgery Fellowship at Seattle Children's Hospital. He recently received his MBA at UCLA Anderson School of Management. He is passionate about educating and mentoring medical students and trainees.



Roger Liu, PhD

Dr. Roger Liu serves as the Director of Medical Education for the Institute for Health Equity at AltaMed. Dr. Liu was a director and instructor in the Departments of Molecular and Cell Biology and Integrative Biology at the University of California, Berkeley, where he taught and mentored thousands of students, from every grade level, socioeconomic background, and location throughout the country. In addition, Dr. Liu served as a professor in the Department of Family Medicine at the UC Irvine School of Medicine as the Director of the Program for Medical Education for the Latino Community (PRIME-LC) Residency Track, as well as the Director of Research and Resident Scholarship.



Junko Ozao-Choy, MD, FACS

Dr. Ozao-Choy is the Vice Chair, Research in the Department of Surgery at Harbor-UCLA Medical Center as well as an Assistant Professor of Surgery at David Geffen School of Medicine at UCLA. She completed her surgical residency in New York at Mount Sinai and then received further training completing a surgical oncology fellowship at John Wayne Cancer Institute in Santa Monica. She subsequently joined the Department of Surgery at Harbor-UCLA in 2014. Her clinical interests include management of breast, melanoma, soft tissue and advanced peritoneal malignancies. Her research interests include immunotherapy, breast cancer and melanoma as well as health disparities.



Peggy S. Sullivan, MD

Dr. Sullivan is the Residency Program Director and Vice Chair for Clinical Education in the Department of Pathology and Laboratory Medicine at UCLA's David Geffen School of Medicine. She received her MD at USC Keck School of Medicine and completed her pathology residency and cytopathology fellowship at UCLA. Her clinical and research interests include breast, gynecologic and cytopathology.



Nicole Valenzuela, PhD

Nicole Valenzuela is an Assistant Director at the UCLA Immunogenetics Center and an Assistant Professor in the Department of Pathology and Laboratory Medicine. Dr. Valenzuela is board certified by the American Society for Histocompatibility and Immunogenetics. As Assistant Director at the UCLA Immunogenetics Center, she provides services to the solid organ and stem cell transplant communities through diagnostic testing and clinical consultation. Her current research explores the heterogeneity of inflammatory phenotype and function across endothelial cells from different vascular beds and tissues of origin.



Sharon Younkin, PhD

Dr. Younkin received her Ph.D. in Counseling Psychology from Ohio State University in 1992, and she currently serves as the Chief of Staff for the Vice Dean for Education at the David Geffen School of Medicine at UCLA. Dr. Younkin's research interests are in medical education, medical student well-being, humanism in medicine, community health, health disparities; community based anticipatory research, and community-campus partnerships.

Morning Break (10 Minutes) Reconvene at 11:00 a. m

- 11:00 a. m. **Miranda, Ruth** Primary Mentor: Yvonne Flores, Ph.D., MPH
Knowledge of Risk Factors and Screening Practices Regarding Colorectal, Liver, and Cancer in General among Mexicans in Cuernavaca, Morelos
- 11:10 a. m. **Morgan, Richard** Primary Mentor: Donald b Kohn, MD
Creating New β -Globin-Expressing Lentiviral Vectors by High-Resolution Mapping of Locus Control Region Enhancer Sequences
- 11:20 a. m. **Nevarez, Mariela** Primary Mentor: Wesley Yin, Ph.D.
Exploring Intersectional Policy Solutions to Challenge the Cradle to Prison Pipeline: Improve Wellness of Girls and Women
- 11:30 a. m. **Patron, David** Primary Mentor: Jalayne J. Arias, JD, MA
Caregivers' Perceptions of Neuroimaging Biomarkers in Early Age-Of-Onset Alzheimer's Disease
- 11:40 a. m. **Scott, Mercedes** Primary Mentor: Sanithia Williams, MD
Black Women & Abortion: An Exploration of Attitudes and Experiences
- 11:50 a. m. **Smith, Wyatt** Primary Mentor: Gary N. Holland, MD
Ophthalmic Problems among Homeless Individuals in Los Angeles County, California
- 12:00 a. m. **Thomas, Michelle** Primary Mentor: Tony Kuo, MD, MSHS
Development of a COVID-19 Biweekly Digest
- 12:10 p. m. **Q&A (15 MINUTES)**

Lunch Break (35 Minutes) Reconvene at 1:00 p. m.

STUDENT PRESENTATIONS (Afternoon Session) **(1:00 – 3:15 p.m.)**

- 1:00 p. m. **Cole, Kalonji** Primary Mentor: Cheryl Hoffman, MD
Educating Patients on Nutrition Using a Short Computer-Based Video: A Successful Clinic Model
- 1:07 p. m. **Felix, Christian** Primary Mentor: Anne Coleman, MD
Racial/ethnic disparities in diabetic retinopathy treatment among California Medicare beneficiaries
- 1:14 p. m. **Fernandez, Jessica** Primary Mentor: Anna Morgan, MD, MSc, MSHP
Social Determinants of Health and Health Care Utilization in the Continuing Care Clinic at Harbor-UCLA Medical Center
- 1:21 p. m. **Garcia, Jairo** Primary Mentor: Mohsen Bazargan, PhD
Emergency Department Utilization among Underserved Older Latinx Adults in South Los Angeles
- 1:28 p. m. **Guerrero, Jessie** Primary Mentor: Shahrzad Bazargan, PhD
Immigration Status and Suicide among Youths: A Systematic Review

Q&A (10 MINUTES)

- 1:45 p. m. **Hernandez Santiago, Laura** Primary Mentor: Roberto Vargas, MD
Predictors of Hospital Readmissions in Adult Patients with Sickle Cell Disease
- 1:52 p. m. **Hernandez, Michael** Primary Mentor: Kevin Diaz, MD
Low Energy Availability Association with Food Insecurity within High School Athletes in Underserved Communities in Los Angeles
- 1:59 p. m. **Hines, Cameron** Primary Mentor: Arleen Brown, MD
Racial/Ethnic disparities in mortality in patients with NAFLD
- 2:06 p. m. **Johnson, Cory** Primary Mentor: Shahrzad Bazargan-Hejazi, PhD
Pain and Prejudice: Racial Disparity in Pain Diagnosis and Management in the UCLA Health System

Q&A (10 MINUTES)

Afternoon Break (10 Minutes) Reconvene at 2:35 p. m.

- 2:35 p. m. **Marsh, Cléa** Primary Mentor: Dennis Kim, MD, FACS
Tourniquet Use for Hemorrhage from Hemodialysis Access: Analysis of Outcomes
- 2:52 p. m. **Santos, Sarai** Primary Mentor: Kara Calkins MD, MS
Periaortic Fat: A Potential Biomarker for Metabolic Disease in Overweight Children
- 2:59 p. m. **Taylor, Aaron** Primary Mentor: Shahrzad Bazargan, PhD
“The Barriers to Using Price Transparency Tools in Adult Insured Patients: A Scoping Review”
- 3:06 p. m. **Thomas, Alexandria** Primary Mentor: Shahrzad Bazargan, PhD
A Scoping Review on Homelessness in the Black Community during the COVID-19 Pandemic; a Content Analysis on Equity and Justice
- 3:13 p. m. **Villanueva, Paulina** Primary Mentor: Annette Regan, PhD, MPH
Evaluating the Role of Healthcare Access on Prenatal Vaccination Rates in the U.S.

Q&A (10 MINUTES)

- 3:30 p. m. **SHAHRZAD BAZARGAN-HEJAZI, PhD**
CLOSING REMARKS

End of 2021 CDU MSRTP Research Colloquium



Aguayo, Esteban^{1,2}

Impact of Safety-Net Status in Cholecystostomy Tube Utilization in Acute Cholecystitis

Mentors: Peyman Benharash, MD MS²

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

Acute cholecystitis is among the most common biliary pathologies, and is effectively managed with cholecystectomy. In select patients, percutaneous cholecystostomy tube (PCT) placement can provide temporary drainage of the gallbladder, allowing for stabilization and interval cholecystectomy. Prior studies have reported an association between safety-net hospital status and inferior clinical outcomes, often attributing these disparities to resource limitations.

Objective(s):

We aimed to determine the impact of hospital safety-net status on cholecystostomy utilization, mortality and readmissions following PCT placement in patients with Tokyo Grade III acute cholecystitis.

Methods:

All adults hospitalized for Tokyo Grade III acute cholecystitis were identified in the 2010-2018 Nationwide Readmissions Database. Hospitals were classified as a safety net hospital (*SNH*) if $\geq 75^{\text{th}}$ percentile of uninsured or Medicaid patients. The remaining hospitals were categorized as non-safety net hospitals (*nSNH*). Multivariable logistic regression was used to identify predictors of PCT utilization, in-hospital mortality and 30-day readmission.

Results:

Of an estimated 268,894 cholecystitis-related hospitalizations included for analysis, 44,171 (16.4%) were treated at a *SNH*. Compared to those treated at *nSNH*, patients at *SNH* were younger (65.1 vs 68.1 years, $P < 0.001$), more likely to be female (47.4% vs 45.2%, $P < 0.001$) with no significant difference in the Elixhauser comorbidity index (2.53 vs 2.54, $P = 0.86$). Patients treated with PCT at *SNH* significantly increased from 743 in 2010 to 1,608 in 2018 (nptrend $P < 0.001$). After adjustment for patient and hospital factors, predictors of PCT use included *SNH* (adjusted odds ratio, AOR, 1.17, $P = 0.02$) among others. Patients that underwent PCT in a safety-net hospital were more likely to experience a longer length of stay ($\beta: +2.1$ days, $P < 0.001$) with increased mortality (AOR: 1.11, $P = 0.03$), hospitalization costs ($\beta: +10,953$, $P < 0.001$) and readmission rates (AOR: 1.11, $P = 0.02$).

Conclusion:

Safety-net status is associated with greater use of PCT in patients admitted for Tokyo Grade III acute cholecystitis. Patients receiving PCT at safety-net hospitals experienced greater mortality and readmission rates along with increased length of stay and hospitalization costs. Efforts to address underlying disparities, such as access to care and resource availability, may improve care for those treated at safety-net hospitals.



Ballon, Jorge^{1,2}

Magnetic Resonance Imaging Guided Biopsy to Evaluate Prostate Cancer Severity in African American Men

Mentors: Leonard S. Marks MD²

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

The mortality rate of prostate cancer has long been considered higher among African-American (AA) men. Most diagnostic information has been obtained by ultrasound-guided prostate biopsy.

Objective(s):

To study the possibility that MRI-guided biopsy might provide histologic clarification of the apparent disparity, we studied use of the new modality at three time points in prostate cancer care: at diagnosis, during active surveillance, and after radical prostatectomy.

Methods:

Subjects were 1002 consecutive men who underwent MRI-guided biopsy combining both systematic and lesion-targeted sampling between 2009-2018. Pathologic upgrading was defined as an increase in Gleason Grade group (GG) at structured follow-up biopsy during active surveillance (AS) or at whole-mount sectioning (prostatectomy.) Statistical significance ($p < 0.05$) was assessed using the Mann-Whitney-U test for continuous data, the Chi-square test (or Fisher's exact if necessary) for categorical data, and the Kaplan-Meier estimator to calculate progression-free survival probabilities.

Results:

AA men (N=57) had higher rates of prostate cancer at diagnostic biopsy than other men (N=945) (79% AA vs 66% others; $p=0.05$). GG was similar in both groups: AA vs Other: GG<2, 25% vs 20%; GG3, 12% vs 10%; GG>4, 9% vs 9% ($p=0.76$). Upgrading at prostatectomy was found in 3/29 (10%) AA men and 32/262 (12%) other men ($p=0.45$). Among low-risk men in AS, Gleason upgrading during a median follow up of 4 years was found in 5/16 (31%) AA men and 93/274 (34%) other men ($p=0.80$).

Conclusions:

In our cohort studied with contemporary MRI-guided biopsy, aggressiveness of prostate cancer was the same for both groups at initial biopsy, at prostatectomy, and during AS. We found with the improved technology, no significant histologic differences between AA and other men. This suggests that differences previously observed were not based on physiology alone. Furthermore, these data indicate that entry into AS programs for AA men with prostate cancer is appropriate, when low-risk pathology is determined using MRI-guided biopsy.



Bodden, Jessica^{1,2}

Postpartum Depression: Identifying Risk Factors and Barriers to Care among Low-income Women: A Systematic Review

Mentors: Shahrzad Bazargan, PhD^{1,2}

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

Postpartum Depression (PPD) is a public health concern that impacts mothers, their children, and the overall family dynamic. PPD affects one in seven women and is the second most common cause of maternal morbidity, ahead of postpartum hemorrhage and preeclampsia. If left untreated, PPD can negatively impact maternal-child bonding, child development and can lead to maternal suicide and infanticide. Literature shows women who are racial/ethnic minorities or are low-income are more likely to develop PPD; however, there exists a need for additional research regarding ideal screening tools, who should be screened, and when referral for mental health care is appropriate.

Objective(s):

A scoping literature review was conducted and sought to identify risk factors as well as barriers to screening and mental healthcare among low-income women.

Methods:

We searched for articles published between January 2015 and December 2019 on PubMed®, MEDLINE, and Google Scholar.

Results:

Five articles were included in this scoping literature review. Among low-income women, those with a prior psychiatric history, multiple instances of childhood and sexual abuse, a traumatic birth experience (e.g., cesarean section), as well as an elevated perception of personal responsibility and limited time availability were significantly more likely to have PPD. Mental health stigmatization, inadequate social support, an inability to pay for mental health treatment, and fears of potential DCFS involvement were identified as barriers to screening and care.

Conclusions:

Knowledge of population-specific risk factors can improve targeted screening practices; however, healthcare providers must create safe spaces that encourage the disclosure of sensitive areas. Interventions aimed at barriers-to-care can lead to timely diagnosis and treatment of PPD among low-income women.



Clavijo, Stephanie^{1, 2}

The Purview Paradox: PrEP utilization at a major Southern California County Teaching Hospital and affiliated clinics

Mentors: Katya Corado, MD³

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA. 3. Harbor UCLA Medical Center

Background:

The Centers for Disease Control (CDC) report that 18% of people who have indications for HIV Pre-Exposure Prophylaxis (PrEP) in the U.S. are prescribed it, with reporting higher in California (21.9%). We predict that PrEP prescription is lower at Harbor-UCLA Medical Center (HUMC) and affiliated clinics.

Objective(s):

Identify the pattern of non-PrEP HIV documentation, PrEP discussion, and new PrEP prescription. Explore provider specialty differences in PrEP discussion and prescription practices.

Methods:

A retrospective chart review of HIV-negative patients with ICD-10 coded diagnoses of sexually transmitted infections (STIs) or high-risk sexual behavior was performed across various medical specialties at HUMC and affiliated clinics in 2018. Documentation of non-PrEP HIV counseling, PrEP discussion and prescription was reviewed from electronic medical records for each encounter. Descriptive statistics and unadjusted logistic regression were completed in STATA.

Results:

The sample included 250 individual patients, all with indications for PrEP. Of those, 47.2% identified as Latinx and 27.2% Black. Of the 250 individual patients, 87 (34.8%) returned for a 2nd visit, 35 (14.0%) for a third, and 9 (3.6%) for a 4th visit, totaling 381 encounters. Of the total encounters, 49.3% had non-PrEP HIV Counseling, 7.3% had discussions about PrEP with their provider, and only 2.1% were newly prescribed PrEP. OB/GYN providers had no discussions (P value 0.017) or new prescriptions (P value 0.03) of PrEP compared to primary care and acute care providers.

Conclusions:

The percent of individuals newly prescribed PrEP (2.1%) at HUMC and affiliated clinics is less than that reported nationally and in California. Primary care providers had a greater proportion of PrEP discussion and PrEP prescription compared to OB/GYN, EM and urgent care when looking at total encounters. Low rates of PrEP discussion and prescription suggest there is further work to be done to understand provider/system related factors in discussing and prescribing PrEP.



Cole, Kalonji^{1,2}

Educating Patients on Nutrition Using a Short Computer-Based Video: A Successful Clinic Model

Mentors: Cheryl Hoffman, MD, FSIR²

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

Over 130 million Americans suffer from one or more chronic diseases which can be prevented, managed, or reversed with adherence to a Whole-Food-Plant-Based-Diet (WFPBD). Short clinic visits limit the extent to which physicians can appropriately educate patients about diet. Administration of short computer based educational videos during patients' waiting time has potential to address this issue.

Objective(s):

Determine the feasibility and impact of a short video-educational intervention on knowledge and confidence of outpatient clinic patients regarding WFPBD vs. Standard American Diets (SAD).

Methods:

Subjects were recruited from an outpatient clinic. A Patients of an outpatient clinic were administered an electronic survey was administered to patients before and after watching an educational computer-based video. Paired pre- to post-video intervention difference scores were calculated independently and analyzed using a related-samples Wilcoxon signed rank test. One-way ANOVA tests were used to investigate survey questions demonstrating the greatest improvement post-video intervention.

Results:

Patients scored significantly higher post-video intervention than pre-video intervention on KB survey questions ($z = 5.748$; $P < .001$) and CB survey questions ($z = 6.605$; $P < .001$). One-way ANOVA tests confirmed that self-reported chronic conditions did not significantly predict baseline (pre-intervention) total KB or CB scores. The exploratory question-specific analysis demonstrated that the survey questions regarding average daily fiber consumption ($P < 0.001$) and the association of saturated fats with chronic disease ($P = 0.001$) were the most significant predictors of the increase in patient knowledge post-intervention.

Conclusions:

Our findings indicate that providing patients with a short computer-based educational video during clinic wait time can significantly increase patient knowledge on the health benefits of a WFPBD. Future studies can test the model on a larger, more varied sample of patients and gauge the longevity of the knowledge gained from this educational model.



Collier, Erin^{1, 2}

Identifying Barriers to Screening Mammography among Underserved Women in Los Angeles

Mentors: Christine Dauphine, MD³

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA 3. Harbor UCLA Medical Center

Background:

Breast cancer is the most commonly diagnosed non-cutaneous cancer among women in the United States. Mortality rates show that Black women are much more likely to die of breast cancer than any other ethnicity. Moreover, additional factors, such as poverty, lack of health insurance and less education, common amongst lower socioeconomic groups, are associated with reduced rates of breast cancer survival. Given the lower survival among certain racial/ethnic groups and the association with lower socioeconomic status, it is important to maintain adequate breast cancer screening within these populations.

Objective(s):

To identify barriers to screening mammography in minority women of underserved populations of Los Angeles County.

Methods:

A sample of women from various lower socioeconomic communities within Los Angeles County was selected for this is a cross-sectional study. Women over the age of 40-years-old were included and asked to complete a 40-item questionnaire with Likert scale questions using variables from the Health Belief Model to identify perceived barriers to screening mammography.

Results:

There was a total of 57 respondents. The majority of participants were Latino (70.2%), followed by Black (28.1%). The majority of participants had medical insurance (62.5%) and a primary care provider (58.9%). Over 84% of respondents reported having ever had a mammogram with over 64% having had a mammogram at least every two years. Fifty-four percent of participants felt that there was a low chance of them ever getting breast cancer in their lifetime, 91% felt that there would be a high chance of them scheduling a mammogram if there were evening and weekend times available, and 38% felt that there would be a low chance of them finding a way to pay for a mammogram. Ninety-five percent of respondents felt that they would be more likely to get a mammogram if their provider recommended it.

Conclusions:

Our study provides insight into the barriers that women of lower socioeconomic status in Los Angeles face in adhering to screening mammography guidelines. Though a high proportion of the sample reported having received a mammogram on a regular basis, 35% of women did not adhere to mammography guidelines of screening at least every 2 years and 16% of respondents reported never having a mammogram. Low perception of lifetime breast cancer susceptibility, hours of operation at mammography centers, and cost were the greatest perceived barriers for our cohort. Physician recommendation was highly important to receiving screening mammography in this sample. Our findings suggest interventions to reduce barriers related to time and cost may have some benefit.



Felix, Christian^{1, 2}

Racial/ethnic disparities in diabetic retinopathy treatment among California Medicare beneficiaries

Mentors: Anne L Coleman, MD, PhD²

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

Diabetic retinopathy (DR) is among the most common diabetic related complication causing irreversible vision loss that affects 29% of US adults aged ≥ 40 years. Within the Medicare population, incidence of DR among Hispanic and African Americans is high but little research shows if disparities exist in the types of treatment they receive.

Objective(s):

To describe the racial differences of DR treatment in Medicare DR Patients in California.

Methods:

Using the Medicare Part-B carriers claims databases from the Centers for Medicare and Medicaid Services (CMS), we identified all diabetic Medicare California beneficiaries in 2017 by International Classification of Diseases 10th Revision, Clinical Modification (ICD-10-CM) codes (E08, E09, E10, E11, E13) along with type 1 and type 2 diabetics with retinopathy (E10.3, E11.3 respectively). The inclusion criteria were those who resided in CA in 2017, age 65 years or older, enrolled in Medicare part A and part B, and had at least 1 part B claim in 2017. Patients' age, gender and race were collected. Current Procedural Terminology (CPT) codes for intravitreal injection (67028), focal laser (67210), panretinal photocoagulation (PRP, 67228) and vitrectomy (67036) were used to identify the mode of treatment for each patient. Multivariable logistic regression models were used to determine the association between demographics and DR treatment by including all demographic variables, and the effect estimates were expressed as odds ratios (OR) with 95% confidence intervals (CI).

Results:

Among 772,686 diabetic patients who met the inclusion criteria, a total of 83,085 (10.7%) had some form of proliferative and/or non-proliferative DR. Most DR patients were type 2 diabetics (97.4%), aged 65-69 (26.8%) or 70-74 (25.7%), females (54.1%), and white (36.9%) or Hispanic (34.2%). Compared with white Medicare DR patients, Hispanics had similar odds of receiving intravitreal injections (OR=0.99, 95% CI: 0.94, 1.03), while there was a lower odds in black (OR=0.83, 95% CI: 0.75, 0.91), Asian (OR=0.65, 95% CI: 0.61, 0.69), and other races (OR=0.83, 95% CI: 0.75, 0.92). Compared with white, non-white patients have higher likelihood of receiving focal laser and PRP (black: OR=1.23 and OR=1.68, respectively; Asian: OR=1.19 and OR=1.40, respectively; Hispanic: OR=1.84 and OR=2.27, respectively; other races: OR=1.34 and OR=1.44, respectively). Surgical intervention with vitrectomy was not statistically significantly different among racial subgroups.

Conclusions:

Despite increased incidence of DR among non-white Medicare beneficiaries, racial disparities may persist in treatment modalities. Not only are non-white Medicare beneficiaries receiving fewer eye examinations as reported in the literature, but also receiving more laser therapy suggesting advanced DR burden.



Fernandez, Jessica^{1, 2}

Social Determinants of Health and Health Care Utilization in the Continuing Care Clinic at Harbor-UCLA Medical Center

Mentors: Anna Morgan, MD MSc MSHP³

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA 3. University of Pennsylvania Perelman School of Medicine

Background:

The Continuing Care Clinic (CCC) at Harbor-UCLA Medical Center follows patients who present to the emergency department with an ambulatory care sensitive condition until they are able to establish primary care. The clinic, however, has a high rate of missed appointments and little is known about patient demographics or social factors that may influence whether or not they present for care.

Objective(s):

1. Describe the demographics of the patient population seen in the Continuing Care Clinic (CCC) at Harbor-UCLA
2. Investigate the social factors that may act as barriers to care

Methods:

Interviewed 70 patients (≥ 18 years of age) who attended or were scheduled for an appointment between May and June 2018. Patients completed a 5-10 minute oral survey using validated screening questions for demographic items and social determinants of health.

Results:

A total of 70 patients were screened; 90% were Latino/Hispanic and over 50% had completed a middle school education or less. Patients reported high levels of financial strain, food insecurity, concern for immigration status, and unemployment.

Conclusions:

Our findings suggest that while the LA County safety net has successfully created a point of access for primary care for uninsured patients, patient engagement remains limited due to patients' financial strain. Future endeavors to provide primary care for these patients could include financial education regarding programs available to assist patients living in poverty and the development of more transparent billing processes to inform patients of their coverage and bill prior to the visit itself.



Garcia, Jairo^{1,2}

Emergency Department Utilization among Underserved Older Latinx Adults in South Los Angeles

Mentors: Mohsen Bazargan, PhD^{1,2}

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

The Latinx population residing in Service Planning Area (SPA) 6 is a growing population, with growing medical needs, and encounter unique social barriers to healthcare. Healthcare utilization is an issue that affects the efficiency and at times outcomes of vulnerable patient groups. Emergency departments (ED) have been affected with population growth and aging. A study being conducted by Bazargan et. al explored medication challenges among older Latinx adults provided an avenue to explore ED utilization among the Latinx community in SPA 6.

Objective(s):

To report prevalence and correlates of ED utilization among underserved older Latino adults within the past 12 months.

Methods:

This cross-sectional study used data from an earlier study focusing on medication challenges among older Latinx adults (2019-2020), n= 165. Participants were self-identifying Latinx residents aged 55 years and older who resided in South Los Angeles. Survey collection employed face-to-face structured interviews (English and Spanish). We collected data on sociodemographic factors, health care utilization, health care access, health behaviors, and health status. Bivariate and multivariate Poisson regression were performed on survey data to explore independent correlates of ER visits.

Results:

In our study (32.3%) reported ER visits within the 12 months. Of those who visited ER, 43% indicated that 'sometime' or 'most of the time' visited an emergency room because it is more convenient than visiting a regular health care provider. When excluding falls as the cause for an ED visit, 50% were reported using the ED out of convenience. Bi-variate analysis noted associations between number of ER visits within last 12 months with age ($p < .05$); disability status ($P < .01$); falls within last 12 months ($P < .01$); convenient of ER visits vs. Regular care ($P < .01$); financial strains ($P < .05$), number of chronic conditions ($p < .01$), and severity of pain ($P < .01$). Multivariate poisson logistic regression associated number of ER visits with convenience of ER compared to regular provider (1.472), male gender (1.330), younger age (0.985), and falls within last 12 months (1.943).

Conclusions:

1 in 3 (32%) older Latinx reported ED usage in past 12 months indicating significant utilization of ED among this subgroup. Correlates of ED utilization among underserved older Latino adults were gender (male 33%), falls within 12 months (94%), convenience of ED vs regular health care provider (47%). Our study highlights the importance of further exploring why patients perceive ED to be more convenient in comparison to visiting regular provider and clinical relevance of fall-prevention measures in this population to reduce ED utilization.



Guerro, Jessie^{1, 2}

Immigration Status and Suicide among Youths: A Systematic Review

Mentors: Shahrzad Bazargan-Hejazi, PhD^{1, 2}

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

Suicide is the 10th leading cause of death in the United States. However, among adolescents, suicide is the 2nd leading cause of death, making it a serious public health problem especially among young adults. In response to recent immigration actions and news, Latino/a adolescents with a family immigrant status, such as having a foreign-born or a non-citizen parent, report more worry and behavioral withdrawal from institutions and communities than do their counterparts with less vulnerable family immigrant statuses. In addition, an adolescents' non-citizenship status can lead to greater unease and behavioral withdrawal, which in turn are associated with poor Latino/a adolescent adjustment and possible increased suicidal ideation.

Objective(s):

To identify and summarize literature reports on family immigration or child/adolescent citizenship status in relation to suicidality.

Methods:

We conducted a systematic review of the current literature regarding childhood and family immigrant statuses and reports on their relationship to suicidal ideation and attempts. Studies were identified from searches in PubMed and PsychInfo using combinations of keywords regarding childhood immigration status and suicidality. Studies were screened for relevancy, full-text articles were assessed for eligibility, data was systematically extracted, and articles were appraised for quality.

Results:

Eligibility criteria were met in 63 articles from 1990 to 2020. After only including articles that had the relevant United States participants, good or excellent quality, 6 articles remained. Of these studies, 50% were cross-sectional in design and 50% were cohort studies. Studies reported high levels of self-harm and suicidal ideation. Most childhood/family immigrant statuses were found to have a significant relationship with suicide ideation and attempts.

Conclusions:

The relationship between immigration status and suicidal behaviors in youth appears to vary by ethnicity. Latino/a adolescents are at an increased risk of suicidality and this can be influenced by the amount of time spent in the new country as well as intergenerational communication and conflicts between parents and their children. There is a clear and urgent need to do additional studies on this topic and to develop targeted public health interventions and psychosocial treatments aimed at preventing suicide in youth who are immigrants and/or have family members who are non-citizens.



Hernandez Santiago, Laura^{1,2}

Predictors of Hospital Readmissions in Adult Patients with Sickle Cell Disease

Mentors: Roberto B. Vargas, MD, MPH^{1,2}

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

Sickle cell disease (SCD) is the most common inherited blood disorder, affecting primarily Black and Hispanic individuals. In 2016 30-day readmissions incurred 95,445 extra days of hospitalization and \$152 million in total hospitalization costs..

Objective(s):

We describe and identify factors that are associated with readmission within 30 days in patients with SCD.

Methods:

We conducted a retrospective observational study of patients with sickle cell disease hospitalized in California between 2005 and 2014. We present descriptive statistics and logistic regression models examining significant differences in characteristics of patients and their association with hospital readmissions in adults with SCD.

Results:

From a total of 2,728 index admissions at the individual level, 70% of those admissions were classified as single admission, 10% had 1 readmission, and 20% had ≥ 2 readmissions within 30 days of an index admission. Significant predictors associated with 0 vs 1 readmission were those who identified as Males (OR 1.37, CI 1.06-1.77), Black (OR 3.27, CI 1.71-6.27) and those having Medicare (OR 1.89, CI 1.30-2.75). Lower likelihood of readmission was found in those with a Charlson Comorbidity index of 3 or more (OR 0.53, CI 0.29-0.97). Significant predictors associated with 0 vs ≥ 2 readmissions were those who identified as Males (OR 1.43, CI 1.17-1.74), Black (OR 6.90, CI 3.41-13.97), Hispanic (OR 2.33, CI 1.05-5.17) had Medicare (OR 3.58, CI 2.68-4.81) or Medical (OR 1.70 CI 1.31-2.20). Lower likelihood for having 2 or more readmissions were increasing age/65+ (OR 0.97, CI 0.96-0.98) and self-payer status (OR 0.32, CI 0.12-0.54).

Conclusions:

Individuals who are males, Black, or those who have Medicare were more likely to have at least one readmission within 30-days of their index admission. Our findings support similar studies of 30-day readmissions in patients with SCD.



Hernandez, Michael ^{1, 2}

Low Energy Availability Association with Food Insecurity within High School Athletes in Underserved Communities in Los Angeles

Mentors: Shahrzad Bazargan-Hejazi, PhD^{1, 2}

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

Proper nutrition for sports and physical activity has been a focal point of athlete health. The term Female Athlete Triad helped describe physically active women who presented with disordered eating, amenorrhea, and osteoporosis. However, the term Relative Energy Deficiency in Sport (RED-S) is now used to capture wider health consequences secondary to low energy availability (LEA). Low Energy Availability in Females Questionnaire (LEAF-Q) has been used to assess LEA. Although the prevalence of disordered eating behavior can tend to be high among those who are screened using the questionnaire, inadequate food availability, including food insecurity (FI) may also contribute risk low energy availability. In 2015, 30% of households living in Los Angeles County, reported to be food insecure.

Objective(s):

The purpose of this observational study is to evaluate a possible association between food insecurity and low energy availability among high school female athletes within underserved Los Angeles communities. Our hypothesis is that there will be a statistically significant association between food insecurity and low energy availability, controlling for confounding variables. To our knowledge, there are no other studies that look directly into food insecurity as a contributing factor to low energy availability within high school athletes.

Methods:

Administration of a 33-item survey that includes the LEAF-Q and Hunger Vital Sign (HVS) to adolescent female athletes. FI (primary predictor variable) measured using the HVS while LEA (primary outcome variable) is measured by LEAF-Q. Linear and adjusted logistic regression models will be used for data analysis.

Results:

The COVID-19 pandemic has significantly impacted study progression. Data is currently being collected.

Conclusions:

The information gathered from this study could potentially guide clinicians on when to screen at risk female athletes for LEA and provide further resources to help minimize the negative health effects that stem from food insecurity.



Hines, Cameron^{1,2}

Racial/Ethnic disparities in mortality in patients with NAFLD

Mentors: Arleen Brown MD PhD²

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

NAFLD refers to the presence of hepatic steatosis, defined as macro vascular fatty infiltration, not explained by other causes. The estimated prevalence of NAFLD approaches 25-30% (1). Clear racial/ethnic disparities exist in rates of NAFLD, with Hispanics (specifically Mexican Americans) at 21.2%, non-Hispanic Whites (NHWs) at 12.5%, and non-Hispanic Blacks (NHBs) at 11.6%. This disparity points to gaps in medical care of these conditions, and may point to disparities in mortality as well.

Objective(s):

To examine racial disparity in NASH-related mortality in a sample, and the factors possibly contributing.

Methods:

We analyzed data from NHANES III 1988-1994, which is a cross-sectional survey conducted by the National Center for Health Statistics. Included participants between the ages of 20-74 years with complete ultrasound data, leaving an analytic sample of 13,899 participants. Descriptive statistics were used to characterize the study population, using means \pm standard error (SE) for continuous variables, and unweighted number/weighted percent for categorical variables. Performed Cox proportional hazards model analysis to determine the predictors of HS, NAFLD, NASH, adjusting for the confounding variables (such as age, sex, behaviors etc).

Results:

Mexican Americans and Blacks had higher rates of hepatic steatosis, NAFLD, and NASH. Adjusted hazard ratios for mortality with NAFLD were 1.29 (1.14-1.48, 95% CI, $p=0.0003$) for NHWs, 1.21 (1.04-1.40, 95% CI, $p=0.0139$) and Mexican Americans, but did not reach statistical significance for NHBs 1.16 (0.96-1.40, 95% CI, $p=0.1218$). Similar trends were observed for hepatic steatosis and NASH results; however, none of the associations reached statistical significance.

Conclusions:

Although Mexican Americans and NHBs had higher prevalence of HS, NAFLD, and NASH, they had comparable or lower mortality relative to NHWs. Additional work is needed to understand the role of demographic, clinical, social, and structural factors in the association between NAFLD, NASH, and HS and mortality.



Hodges, La'Mayah^{1, 2}

Understanding the Signaling Pathway of Triple Negative Breast Cancer in African American Women to Address Cancer Disparities

Mentors: Shehla Pervin, PhD^{1, 2}

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

Breast cancer is the most common cancer in women and the second most common cause of cancer deaths in the same population. Of all of subtypes, triple negative breast cancer (TNBC) is the most aggressive and is most prevalent in African American women. Due to vast heterogeneity, treatment options are limited. Characterization of key players in the signaling pathway may help identify potential targets for therapeutic intervention.

Objective(s):

To identify key players in microenvironments that promote early, aggressive growth of TNBC.

Methods:

Western Blots were performed to confirm results of preliminary RNA-Seq data. Quantitative PCRs were then performed to determine if the origin of proteins expressed were that of tumor cells or of the host environment.

Results:

Western blots demonstrated increased expression of beige adipocytes, collagen, macrophages, and mammary cancer stem cell markers. Quantitative PCR confirmed increases in expression seen in Western assay. Further, it was shown that beige adipocytes differentiated from, both, tumor cells and the host environment while collagen, ALDH1, and macrophage cell markers were of only host origin.

Conclusions:

Our findings confirm the results of the RNA-Seq analysis and identified potential key players in tumorigenesis and disease progression. These key players may serve as targets for novel treatments and ultimately decrease the disparity of breast cancer deaths among African American women.



Holloway, Janell^{1, 2}

Identifying barriers to screening mammography use among low-income women in a public hospital setting in Los Angeles

Mentors: Christine Dauphine, MD³

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA, 3. Harbor-UCLA

Background:

Mammography remains the most effective method for early detection of breast cancer. Still, disparities in mammography use persist, with the lowest rates reported for women of Hispanic ethnicity and those with Medicaid-based insurance coverage.

Objective(s):

The aim of this study was to better understand the barriers to mammography use among racially diverse low-income women with Medicaid coverage.

Methods:

All female patients age 50 to 74 at our facility that did and did not have a screening mammogram in the recent 24 months were identified. Variables were collected from the electronic medical record (EMR), and were analyzed using bivariate and multivariable analysis to identify independent predictors of barriers to mammogram screening among the two groups. A phone survey was administered to patients that did not have a mammogram. It asked them to (1) state in their own words the primary reason for not getting a mammogram and (2) to complete a survey based on the Health Belief Model (HBM) subcategories. The most common reason for not getting a mammogram was identified, and was categorized by race.

Results:

There were 610 that did and 810 that did not complete a mammogram. The variables that were significantly associated with not getting a mammogram were being no show to mammogram, having a PCP >12 months, never going to a PCP, and identifying as “other” for race. For the survey, the most common self-stated reason for Hispanic women was due to lack of knowledge about insurance coverage of mammography; for Black it was being busy with work or personal/family illnesses; for Asian a language barrier; and for White it was occupation with illness. The most commonly identified barrier for all races based off of the HBM questions was limited mammography hours.

Conclusions:

In an underserved, predominantly Hispanic population who has insurance coverage, our study suggests that practitioners should prioritize getting women ages 50-74 into see their PCP yearly. Health professionals should consider better educating Hispanic patients on their insurance coverage, providing educational material that better encompasses Asian languages, and extending hours to the mammography center which could help patients of all races find time to schedule a mammogram as efforts to minimize barriers will ultimately serve to decrease racial health disparities in breast cancer outcomes.



Iglesias, Brenda^{1,2}

Total Joint Replacement Surgeon Choice: A qualitative analysis in a Medicare population

Mentors: Rafael Buerba, MD, MHS³

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA. 3. Banner Health Medical Center

Background:

Previous research has shown that ethnic minority patients in the United States tend to have poorer outcomes after joint replacement surgery and that they are less likely to receive joint replacement surgery at high-volume hospitals. However, little is known regarding how this group of patients chooses their joint replacement surgeon.

Objective(s):

The purpose of this study was to understand the factors influencing the choice of joint replacement surgeon amongst a diverse group of patients.

Methods:

Semi-structured interviews were conducted with Medicare patients who underwent a hip or knee replacement within the last 24 months (N=38) at two different hospitals. Interviews were audio recorded, transcribed and verified for accuracy. Transcripts were reviewed using iterative content analysis to extract key themes related to how respondents chose their joint replacement surgeon.

Results:

MD referral/recommendation appears to be the strongest factor influencing joint replacement surgeon choice. Other key considerations are hospital reputation and surgeon attributes—including operative experience, communication skills, and participation in shared decision-making. Gender/ethnicity of a surgeon, industry payments to surgeons, number of publications and cost did not play a large role in surgeon choice.

Conclusions:

The process of choosing a joint replacement surgeon is a complex decision-making process with several factors at play. Despite growing availability of information regarding surgeons, patients largely relied on referrals for choosing their joint replacement surgeon regardless of ethnicity. Referring physicians need to ensure that patients are able to access hospital and surgeon outcomes, operative volume, and industry-payment information to learn more about their orthopedic surgeons in order to make an informed choice.



Johnson, Cory^{1,2}

Pain and Prejudice: Racial Disparity in Pain Diagnosis and Management in the UCLA Health System

Mentors: Shahrzad Bazargan-Hejazi, PhD^{1,2}, Peregrina Arciaga, MD^{1,2}
1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

Studies show minorities have enhanced sensitivity to pain with increased severity compared to non-Hispanic white patients. However, in 2003, a congressionally mandated study by the IoM/NAS defined pain as an area of major health disparities. Over the many years since The IoM/NAS study, various reports have given recommendations on how to combat inequities in pain management. Literature falls short of identifying whether these recommendations are being implemented and increasing equity among populations.

Objective(s):

Identify and compare racial disparities in diagnoses of pain-related disorders and medical management using former and current medical record coding systems.

Methods:

Retrospective Database analysis of patients within the UCLA Health System diagnosed with the most common chronic pain disorders identified by the UCLA Comprehensive Pain Center charting forms. Patients were categorized by race, ethnicity, and average income of neighborhood using both ICD9 and ICD10 coding systems. Diagnoses and opioid prescriptions were identified among the populations of patients without the major modifiable risk factors and contrasted with UCLA demographic data.

Results:

A two-sample t-test and sub-category χ^2 test were performed with the data. Overall, it was found that white individuals predominate the pain patient population, for both diagnosis and treatment (64-75%), with significant increases in percentage above their UCLA Health demographic. Asian and Hispanic patients were primarily underrepresented (>3% decrease). Additionally, Black and Hispanic patients making <\$100k have significantly greater odds of diagnosis of a pain disorder (3.499 and 2.55, respectively), but Black patients of the same group have only slightly greater odds of receiving an opiate medication (1.24, Hispanic OR=2.64).

Conclusions:

Data suggests race continues to play a role in chronic pain assessment and management. Non-Hispanic White patients dominate the pain world being diagnosed and treated more often than BIPOC patients. Pain management should be based on patient experience rather than race or provider perception.



Juarez, Jesus^{1,2}

Race-Specific Differences in Outcomes among Black and White Men Receiving Definitive Radiotherapy with Androgen Deprivation Therapy for Localized Prostate Cancer: A Meta-Analysis

Mentors: Amar Kishan, MD²

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

Black men are more likely to be diagnosed with prostate cancer, to have aggressive disease, and twice as likely to die of the disease compared to White men.

Objective(s):

To identify race-specific differences in initial treatment responses in localized prostate cancer.

Methods:

Individual patient data were obtained for 9259 patients (18.1% Black men and 81.9% White men) enrolled on eight randomized controlled trials evaluating definitive radiotherapy (RT) ± short-term or long-term androgen deprivation therapy (STADT and LTADT). The primary endpoints were biochemical recurrence (BCR), distant metastasis (DM), and prostate cancer-specific mortality (PCSM). Fine-Gray subdistribution HR (sHR) models evaluated the cumulative incidences of all endpoints after stratification by National Comprehensive Cancer Network (NCCN) risk grouping. A meta-analysis adjusting for age, Gleason score, clinical T stage and initial PSA estimated pair-wise comparisons of treatments within and between Black and White men.

Results:

Compared to White men, Black men were more likely to have NCCN high-risk disease at enrollment (39.2% vs 33%, $p < 0.001$). However, within the high-risk stratum Black men had lower 10-year rates of BCR (46.1% vs. 50.4%, $p = 0.02$), DM (14% vs. 21.6%, $p < 0.001$), and PCSM (4.9% vs. 9.8%, $p < 0.001$). After adjusting for age and disease characteristics, Black men with high-risk prostate receiving RT+STADT had lower rates of BCR (sHR 0.73, 95% CI 0.62-0.86, $p < 0.001$), DM (sHR 0.64, 95% CI 0.49-0.84, $p = 0.001$) and PCSM (sHR 0.49, 95% CI 0.25-0.95, $p = 0.04$). There were no differences in BCR, DM, or PCSM among men receiving RT+LTADT. The interaction between race and the impact of adding STADT to RT alone on BCR was statistically significant ($p = 0.003$).

Conclusions:

Black men enrolled on randomized trials with long-term follow-up have higher risk disease at enrollment, but better BCR, DM, and PCSM outcomes with RT-based therapy compared with White men, particularly with the addition of STADT.



Kelly, Mikaela ^{1,2}

“Understanding Barriers and Facilitors to Contraceptive Use among Youth Impacted by Commercial Sexual Exploitation: “I didn’t really have a choice”

Mentors: Eraka Bath, MD²; Elizabeth Barnert, MD, MPH²

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

Youth impacted by commercial sexual exploitation have high reproductive health needs, including high rates of unplanned pregnancy and sexually transmitted infections.

Objective(s):

To understand facilitators and barriers related to youth impacted by sexual exploitation’s utilization of condoms and hormonal contraception.

Methods:

We conducted semi-structured interviews with 21 cisgender females impacted by commercial sexual exploitation. Interviews were audio-recorded, transcribed, and coded for emergent themes. Participants were enrolled through group homes and a juvenile specialty court serving youth impacted by commercial sexual exploitation.

Results:

Overall, participants reported relatively easy access to both hormonal contraception and condoms, expressing a strong preference for condoms as their primary form of contraception. Most respondents described an aversion towards hormonal birth control, attributed to personal experiences and peer accounts of side effects. Many also shared a common belief that hormonal methods are “unnatural,” cause infertility, and have low efficacy. Although youth expressed a preference for condom use, they also reported frequent unprotected sex. Furthermore, there were notable barriers to hormonal contraception and condom use that were specific to youths’ sexual exploitation, primarily due to their lack of control while trafficked.

Conclusions:

While participants noted relatively easy access to contraception, a number of barriers to both condoms and hormonal contraceptive utilization exist. Many of these barriers align with youth identified in other at-risk adolescent populations, however, youth also face a number of barriers that may be attributable to their unique experience of commercial sexual exploitation. Contraceptive education that dispels prevailing myths, sets clear expectations regarding side effects, and emphasizes autonomy is most likely to resonate with their worldview and experiences.



Lopez, Diana ^{1, 2}

MyPlate Dissemination for Latinos in Rural Communities

Mentors: Shahrzad Bazargan-Hejazi, PhD^{1, 2}, Ann Cheney, PhD³

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA, University of California, Riverside

Background:

The MyPlate guidelines are the cornerstone of government-sponsored nutrition education programs, following these guidelines reduces risk of major chronic diseases. Yet, Latinos in rural communities have limited access to such programs. Furthermore, limited access to healthy food resources and little experience incorporating evidence-based dietary practices into daily food preparation create additional barriers to healthy food consumption.

Objective(s):

Our project will focus on increasing the dissemination of the MyPlate evidence via creation of a cookbook, cooking demonstrations, and social media platforms. The goal is to enhance health knowledge and patients' motivation and ability to use and apply this evidence.

Methods:

Establishment of shared governance through a Steering Council of patients and stakeholders. At the beginning of the project, council will meet quarterly to oversee project goals, capacity building, and dissemination activities. The council will form a Dissemination Workgroup, led by patient and community partners, to review and revise the MyPlate recipes, as well as develop a dissemination plan.

Results:

Motivation and ability to use and apply the MyPlate recipes will be evaluated via pre and posttest surveys administered immediately before and after the community cooking demonstrations. The 24-item diabetes knowledge scale will be used to assess pre and post diabetes knowledge. Will evaluate the reach of MyPlate evidence via basic descriptive statistics collected throughout the 12 months: total number of cookbooks given to patients, quarterly social media brief reports on comments, and sharing/retweeting of MyPlate related material.

Conclusions:

MyPlate Dissemination for Latinos in Rural communities is key to addressing the need for: culturally vetted health education and increasing access to evidence-based health education. We anticipate that the community will consider this intervention to be a success if patients demonstrate motivation to use the recipes and have increased health knowledge following participation in the cooking demonstrations.



Marsh, Clea^{1,2}

Tourniquet Use for Hemorrhage from Hemodialysis Access: Analysis of Outcomes

Mentors: Dennis Y. Kim MD, FACS³; Christian de Virgilio MD, FACS³
*1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of
Medicine at UCLA³. Harbor-UCLA Medical Center*

Background:

Black and Latino patients with end stage renal disease (ESRD) are less likely to undergo arteriovenous fistula/graft (AVF/AVG) placement and more likely to experience complications resulting in loss of access (LOA). Non-traumatic arteriovenous hemorrhage is an uncommon yet potentially fatal complication that can also result in LOA. Though optimal methods of bleeding control have yet to be defined, national campaigns such as Stop the Bleed have increased public awareness of tourniquet use for traumatic extremity hemorrhage control and can serve as an initiative directed at ESRD patients and their caretakers.

Objective(s):

We aimed to describe the use of tourniquets in hemodialysis access hemorrhage events and examine their effect on outcomes in patients who received care at our county facility.

Methods:

We performed a 5-year retrospective cohort analysis of adult patients presenting to our Level 1 trauma center with vascular access bleeding. Variables analyzed were demographics, type and location of access, admission vital signs, and method of definitive hemorrhage control, transfusion requirements, mortality and loss of access. Patients who had tourniquets placed were compared to those who did not.

Results:

Of 91 patients (mean age 65 years), hemorrhage occurred outside the dialysis center in 71%. Tourniquets were placed in 34 (37%), of which 62% successfully controlled the bleeding. In 50 patients (55%), non-medical personnel made the initial attempt at bleeding control. Mortality was 3%, and loss of access occurred in 23%. There was no significant difference between the tourniquet and non-tourniquet groups with respect to mortality or loss of access (p=NS).

Conclusions:

Vascular access hemorrhage occurs more commonly in non-healthcare settings and initial attempts at bleeding control are often dependent on non-medical personnel. Although mortality is low, nearly ¼ lose vascular access. Prospective studies should prioritize patient education on safe and effective tourniquet placement in vascular access hemorrhage events.



Mathelier, Patricia^{1,2}

Identifying the Gaps in Autism Services amongst Parents with Autistic Children.

Mentors: Shahrzad Bazargan-Hejazi, PhD^{1,2}

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

In 2018, the CDC estimated the prevalence of Autism Spectrum Disorders (ASD) as 1 in 59 children (1.7%) in the US, and this is a 15% increase since 2010. For children with ASD, concerns about their development usually arise around age 12-24 months, and are detected by their parents or primary care provider.

Unfortunately, the path to an autism diagnosis is a long and frustrating process for the entire family, and children often wait upwards of 6-12+ months for a confirmed diagnosis followed by another waiting period to start receiving services. Families of children with autism often use various means of trying to find accurate information and support through various online channels, such as forums, social media pages, blogs, YouTube videos and more, with limited positive results.

Objective(s):

The purpose of this study is to test the acceptability by parents and their willingness to use and engage with a digital mobile application as they navigate the process of receiving an ASD diagnosis for their child and setting up subsequent therapy and follow-up. This digital mobile application specifically focuses on ASD education for parents, facilitated communication between families and providers, and receiving parental social and emotional support from other ASD families and qualified health professionals.

Methods:

Parents, caregivers, and healthcare providers of children with autism were identified through targeted social media ads, word of mouth, and provider referrals to participate in an hour long semi-structured interview, an online survey, or both.

Results:

100% of parents surveyed & interviewed report spending at least 20 minutes/ day googling information on autism and 33% of parents spend over an hour/ day googling information about autism. Parents report feeling alone and lost when researching autism on their own, especially when it comes to provider/ insurance navigation and finding parenting modification tools for challenging behavior. 100% of parents report that they would use a mobile application daily to help better understand ASD through video modules, to communicate with providers, to receive a personalized plan for navigating diagnoses and accessing services, and to connect with other families going through a similar experience with ASD.

Conclusions:

Although children with ASD are protected by laws protecting children with disabilities, the reality is that many children often receive delayed or inadequate services due to various barriers including socioeconomic barriers. A lack of emotional/ mental support for parents of children with autism in combination with a lack of education and access to autism resources can lead to delayed ASD diagnosis and delayed early intervention services, thus resulting in worsening outcomes for the child. The top three issues that parents of children with autism reported having are 1) missing feelings of normalcy, 2) time constraints, and 3) not seeing progress. Additionally, a big challenge for parents is lack of easily accessible resources and information, and not a lack of motivation to seek information (i.e. due to parents working multiple jobs, high prices of therapy, balancing parenting of non-ASD siblings), which is often assumed by lower income and minority families. By creating a digital solution for these parents, they will feel better supported and also have better education on autism and related treatment and therapies. In turn, this can lead to earlier age at diagnosis and faster access to services, which can result in better childhood outcomes.



Miranda, Ruth^{1,2}

Knowledge of Risk Factors and Screening Practices Regarding Colorectal, Liver, and Cancer in General among Mexicans in Cuernavaca, Morelos

Mentors: Yvonne Flores PhD^{1,2}; Folasade May MD, PhD^{1,2}

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

Colorectal cancer (CRC) is the 3rd most common cancer worldwide and 4th most common cancer in Mexico. Hepatocellular carcinoma (HCC) is the 6th most common malignancy worldwide. Currently, there are no national CRC screening programs in Mexico. In other countries with specific recommendations for CRC screening, early detection has been shown to reduce cancer-associated morbidity and mortality.

Objective(s):

To report the knowledge about risk factors and screening regarding CRC and HCC among a sample of clinic patients, to explore the attitudes of early detection to cancer screening in Mexico, to assess the willingness of patients to get CRC screening, to report gap between screening knowledge and screening practices.

Methods:

Observational study took place at a IMSS clinic in Cuernavaca, Mexico. A total of 106 patients ages 50 to 75 and born in Mexico were eligible. The study questionnaire was 73 items, in Spanish and 20-30 minutes long. Descriptive data analysis was then conducted.

Results:

For CRC, 93% of patients correctly identified unhealthy diet as a risk factor but only 48% identified being over 50 years of age as a risk factor. For HCC, 99% of patients correctly identified heavy drinking as a risk factor but only 30% identified being a male as a risk factor. Approximately 75% of patients responded they knew about screening tests for colon cancer in Mexico. More than 98% of patients reported they would get a stool test or colonoscopy if recommended by their doctors.

Conclusions:

Among the sample of clinic patients, knowledge across risk factors for CRC, HCC, and cancer in general was high, except for age and gender. Overall, the sample had a favorable attitude towards cancer screening preventative measures. Nearly all patients were willing to receive CRC screening if recommended by their doctor.



Morgan, Richard^{1, 2}

Creating New β -Globin-Expressing Lentiviral Vectors by High-Resolution Mapping of Locus Control Region Enhancer Sequences

Mentors: Donald B. Kohn, MD^{1,2}

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

Autologous hematopoietic stem cell transplantation combined with ex-vivo gene therapy is a promising approach in treating disorders of the hematopoietic system. Identifying combinations of strong lineage-specific control elements that do not impede packaging or transduction efficiency when included in lentiviral vectors has proven challenging. Candidate enhancers or promoters must be tested against a litany of performance criteria until high-performing combinations can be found. A current limitation in designing enhancers of minimal-length is a lack of knowledge regarding the exact boundaries of “sequence intrinsic” enhancers (the actual DNA sequences that provide enhancer function) for a given cell type or state. Current technologies such as ChIP-Seq and its variants provide vague boundaries of enhancer location when specific combinations of DNA-protein binding can be observed within a region. Furthermore, technologies based on DNA-protein binding may fail to assist in identification of enhancer regions when proteins transiently bind to functional DNA sequences, perturb transcription by modifying local chromatin structure, and dissociate before they can be fixed in place by DNA-protein crosslinking.

Objective(s):

We have developed a method termed LV-MPRA (Lentiviral Vector-based, Massively Parallel Reporter Assay), to generate targeted enhancer maps of the β -globin Locus Control Region (LCR) that provide boundaries of “sequence intrinsic” enhancers at near base-pair resolution. We use these maps to design lineage specific LVs and characterize their performance across multiple categories and then test the best LVs in a mouse model of Sickle Cell Disease.

Methods:

We employ LV-MPRA to elucidate the boundaries of the previously unknown “intrinsic enhancer” sequences of the β -globin Locus Control Region (LCR). We observe that enhancer activity peaks fall well within “classical” enhancer boundaries as defined by the literature. The LV-MPRA-guided constructs (termed 95 and 97.5) were then evaluated in the “Townes” mouse model of SCD to assess their ability to induce hematologic correction. At 16 weeks post bone marrow (BM) transplantation, average levels of %Hb β AS3 / total hemoglobin tetramers were found to be 0%, 31.8% and 39.6% in mice that received mock, 95, or 97.5 transduced BM, respectively. Moreover, statistically significant increases in total Hb levels and red blood cell counts were observed for 95 and 97.5 when compared to mice that received mock transduced BM.

Results:

We have identified that there is a geographical disparity in how LAUSD restorative justice practices are being implemented across the district. While student handbooks with disciplinary policies are made publically available, data on suspensions and expulsions are not publically accessible for LAUSD. EdData has aggregated data in a way that demonstrates that Black children are disparately suspended and expelled; however, the data results are unclear when you couple gender and race. There is also no current reporting or system of accountability for students to evaluate their teachers.

Conclusions:

We have harnessed the power of massively parallel automated DNA synthesis and NGS to simultaneously analyze thousands of synthetic DNA fragments in parallel to identify “sequence intrinsic” enhancers of the LCR at near base pair resolution. These maps were used to generate novel LVs that ameliorated hematologic parameters defining the pathological phenotype of SCD in the mouse model of the disease. Case reports describing patients afflicted with both SCD and hereditary persistence of fetal hemoglobin often describe the clinical course as benign when HbF levels are 10% or higher (likely due to pancellular distribution of HbF). Thus, the *in vivo* percentages of β AS3-globin seen for 95 and 97.5 are at levels of expression expected to be therapeutic. These new LV designs should have advantages for clinical-scale production providing the highest level of gene transfer for the lowest amount of vector.



Nevarez, Mariela^{1,2}

Exploring Intersectional Policy Solutions to Challenge the Cradle to Prison Pipeline: Improve Wellness of Girls and Women

Mentors: Wesley Yin, PhD²

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

The school to prison pipeline describes the shunting of students out of schools and later into justice involvement. In the US, girls are becoming the fastest growing juvenile justice population. Black girls experience adverse childhood experiences at rates higher than their white peers and also receive a disproportionate rate of out of school suspensions starting as early as preschool. There is a compelling need to investigate school discipline and care policies to increase the wellness of Black girls. The Los Angeles County (LAC) Board of Supervisors established the Women and Girls Initiative (WGI) in 2016 to examine systemic issues that lead to inequitable gender outcomes. The WGI has tasked our group with examining the school-to-prison pipeline in LAC to offer policy recommendations to enhance the wellness of Black girls.

Objective(s):

Identify punitive, disciplinary policies and offer alternatives.

Highlight transformative and restorative justice policies implemented across different unified school districts in LA County high schools.

Provide policy recommendations that disrupts suspensions and expulsions for Black & Indigenous girls to LACOE.

Highlight the work that the Youth Justice Workgroup is engaging in around student justice.

Methods:

A mixed methods assessment will be completed by utilizing quantitative county level data via EdData. This will offer insight into school performance, chronic absenteeism, suspensions/expulsions, and college and career readiness to allow for an intersectional analysis. Qualitative data collection will be through LAC stakeholder interviews and reviewing Youth Justice Work group recommendations.

Results:

We have identified that there is a geographical disparity in how LAUSD restorative justice practices are being implemented across the district. While student handbooks with disciplinary policies are made publically available, data on suspensions and expulsions are not publically accessible for LAUSD. EdData has aggregated data in a way that demonstrates that Black children are disparately suspended and expelled; however, the data results are unclear when you couple gender and race. There is also no current reporting or system of accountability for students to evaluate their teachers.

Conclusions:

Enforcement of zero-tolerance-like and punitive school disciplinary policies have increased the amount of students sent home for minor infractions. The introduction of school police officers expedites juvenile introduction into the judicial system. School discipline policies often substitute care opportunities. Children with behavioral challenges often experience adverse childhood experiences and would benefit from intervention by behavioral specialists, mental health providers and physicians. Instead, many children are pushed out of schools, increasing the risk of incarceration. From interviews thus far, restorative justice policies are an underutilized tool that can benefit students and schools. Further results of qualitative interviews will be used to identify additional policy recommendations to promote the wellness of Black girls in LAC.



Patron, David^{1,2}

Caregivers' Perceptions of Neuroimaging Biomarkers in Early Age-Of-Onset Alzheimer's Disease

Mentors: Jalayne Arias, JD, MA³, Shahrzad Bazargan-Hejazi, PhD^{1,2}

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA. 3. UC San Francisco

Background:

The diagnosis of Early Age-of-Onset Alzheimer's Disease (EOAD) occurs prior to age 65 and triggers significant legal, financial, and social decision-making burden for patients and families. Individuals with AD (Alzheimer's Disease) and caregivers often have minimal understanding of neuroimaging and its role in dementia diagnosis. Neuroimaging biomarkers are advancing a new definition of AD from a clinical to a biomarker construct.

Objective(s):

The current study examines how neuroimaging biomarkers impact perception of diagnosis and disease among caregivers.

Methods:

Patients and their caregivers completed an interdisciplinary diagnostic consensus conference where neuropsychological testing and neuroimaging findings, MRI and/or PET, were reviewed. Patients and caregivers were interviewed within 30 days of the conference and again after 6-9 months. We analyzed interview transcripts using qualitative analysis that involved data immersion, theme identification, and interpretation. Thematic analysis was conducted using an adjusted grounded theory approach in NVivo, focusing on diagnostic path and disclosure process of MRI/PET results.

Results:

Caregivers were 6 men and 7 women, averaged 60.9 years old, with college education (mean=16.2 years). Most caregivers were spouses (85%). Patient-participants were similar in age (mean=59.8), education (mean=16.7), gender (7 men and 6 women), and race. The frequency of missed or misdiagnosis highlights the importance and value of neuroimaging biomarkers. Participants reported that imaging was important and valuable to understanding their loved one's illness, mitigating patients' denial, or solidifying the diagnosis, e.g. putting an end to the search for a diagnosis.

Conclusions:

Families were recruited as a part of their enrollment in research and therefore representations may differ in those who do not have or been engaged in established clinical care. However, these narrative descriptions capture distinct insight into caregivers' perception of neuroimaging biomarkers and diagnosis for early age of onset dementia and suggest future direction for patient and caregiver education at time of diagnosis.



Santos, Sarai^{1,2}

Periaortic Fat: A Potential Biomarker for Metabolic Disease in Overweight Children

Mentors: Kara Calkins, MD²

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

The function of adipose tissue is determined by its location and type (white vs. brown fat). In adults, periaortic fat and white fat promote metabolic disease. However, little is known about periaortic fat in children.

Objective(s):

Using a novel research tool, free-breathing magnetic resonance imaging (MRI), this study aimed to: 1. measure periaortic fat volume and content and 2. Investigate correlations between periaortic fat and clinical characteristics in children.

Methods:

Healthy and overweight (body mass index \geq 85th percentile) children were eligible. Periaortic adipose tissue volume and proton density fat fraction (PDFF), a biomarker for adiposity content, were measured along the abdominal aorta using free-breathing MRI.

Results:

Healthy children (n=21, median age 11.4 [IQR 9.9-14.1]) and overweight children (n=26, age 14.9 [11.9--16.2]) completed the study (p<0.01). In the overweight group, 62% had NAFLD and their median [IQR] body mass index z-score was greater than the healthy group (3.0 [0.8-4.0] vs. -0.3 [0.8-4.0], p<0.001). In comparison to healthy children, periaortic adipose tissue volume was greater in overweight children (5.2 cm³ [3.6 - 7.4] vs. 3.3 cm³ [2.9 - 4.2], p=0.0005). Likewise, periaortic adipose tissue PDFF (54% [44 - 63] vs. 33% [29 - 38], p<0.0001) was significantly greater in overweight vs. healthy children. Adipose tissue volume and PDFF correlated with body mass index z-score (r=0.65 and r=0.79, p<0.001 each) and waist circumference (r=0.69 and r=0.79, P<0.0001 each). In contrast, periaortic adipose tissue volume and PDFF were negatively correlated with serum high density lipoprotein (r= -0.66 and r = -0.56, p<0.05 each).

Conclusions:

In this study, overweight children had increased periaortic fat volume and PDFF compared to their healthy counterparts. A higher fat content in the periaortic region (i.e., PDFF) may indicate increased susceptibility to metabolic diseases, including dyslipidemia.



Scott, Mercedes^{1, 2}

Black Women & Abortion: An Exploration of Attitudes and Experiences

Mentors: Sanithia Williams, MD³, Andrea Jackson, MD, MAS³

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA 3. UC San Francisco

Background:

While the abortion rates have declined in the United States within the last 20 years, abortion rates among Black women in the United States continue to increase. Racial inequities in access to contraception and differences in contraceptive preferences account for these differences in abortion rates. It was out of these inequities and understanding that reproduction is not only about being pregnant or not, that the framework of reproductive justice was born. Reproductive justice empowers women—specifically Black women and other people who are marginalized in society—to have complete control of their reproductive destiny. Our objective is to better understand how Black women interpret and apply their lived experiences to decisions pertaining to abortion. We believe that this cross-sectional qualitative study will assist researchers, advocates and funders in understanding how they can best use their expertise to effectively improve the reproductive health and outcomes of Black women in the United States. Also, by bringing to attention the influences of race, racism, and a history of coercion around fertility, this work can increase Black women’s ability to access safe, empowering reproductive health services and to be supported in their reproductive decision-making.

Objective(s):

- Described Black women’s attitudes and experiences with abortion.
- Explored how Black women view abortion in the setting of their racial identity.
- Determined if Black women internalize racialized messages regarding abortion.
- Deepened our understanding of the Black woman’s experience.

Methods:

We chose to conduct a qualitative study where we interviewed 16 women who were 18–45-year-old, non-pregnant and English speaking. We chose this study design because qualitative studies are hypothesis generating and we wanted to start with a broad perspective, where we allowed the Black women to lead the narrative and tell us where we should be going next.

Results:

Various themes emerged such as, “The Double Bind”, the ideal of the “strong Black woman” and the fear of bringing a Black child into this world. All of which revealed that whether or not Black women choose to have an abortion is more complex and highlights the complexity that race plays in attitudes and decisions about abortion for Black women.

Conclusions:

Reproductive autonomy is a cornerstone in patient-centered reproductive health care. While Black women are fully capable to make sound decisions for themselves and their families, their agency is often limited by public policy. If we are to close the gaps in reproductive health disparities, we must center the voices of Black women and honor their lived experience. Starting with these stories, will better lead us to community-centered and community-based solutions.



Smith, Wyatt^{1,2}

Ophthalmic Problems among Homeless Individuals in Los Angeles County, California

Mentors: Gary Holland, MD, MPH, PhD²

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

Homeless populations face barriers to medical care, yet have greater morbidity/mortality than the general population. With limited access to care, vision-threatening ophthalmic diseases and uncorrected refractive errors can remain undetected, profoundly impacting activities of daily living. We investigated prevalence and spectrum of ophthalmic problems among individuals attending a clinic for the homeless in Los Angeles County (LAC).

Objective(s):

To describe ophthalmic problems among individuals attending a clinic for the homeless in Los Angeles County (LAC), California.

Methods:

We reviewed screening records for all homeless individuals evaluated at a monthly free clinic in West Hollywood, CA from August 2015 through February 2020. Demographics, medical history, and examination findings had been recorded on a standard form. Individuals with reduced visual acuity underwent manifest refraction. Ophthalmologists performed slit lamp biomicroscopy and dilated funduscopy.

Results:

A total of 272 homeless individuals were examined during the study period. Median age was 50.5 years (range 18.5-90.3 years). The majority were male (n=179 [66.1%]); 63 (26.4%) were African American, which differed substantially from the general LAC population (9%). Uncorrected refractive errors were present in 117 (44.8%) of 261 individuals. Visual acuity in the better eye improved with refraction to 20/40 or better in 244 (94.6%) of 258 individuals. Glaucoma was suspected in 14 (5.2%) of 267 individuals. Diabetic retinopathy (DR) was identified in 7 (28.0%) of 25 diabetics.

Conclusions:

Prevalence of DR among homeless diabetics was comparable to estimates for the general US population, while suspected glaucoma was more than double the prevalence reported for the general US population. There is a substantial burden of refractive errors, glaucoma, and DR among homeless individuals. Community outreach strategies are needed to improve access of homeless populations to evaluation and treatment of ophthalmic problems. The chronic nature of glaucoma and DR highlight the need for strategies to ensure adequate follow-up care for these individuals.



Taylor, Aaron^{1,2}

“The Barriers to Using Price Transparency Tools in Adult Insured Patients: A Scoping Review”

Mentors: Shahrzad Bazargan-Hejazi, PhD^{1,2}

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

Background: In the United States, there is an increasing healthcare spending with significant variation in the costs of services within a particular market. Though there is growing interest in price transparency, consumers are generally not using the tools available to compare prices for services offered.

Objective(s):

To synthesize the various barriers to consumer use of price transparency tools in insured adult patients.

Methods:

Scoping review of articles on PubMed, with search criteria including: Title includes “price transparency”, MeSH terms includes “costs”, and dates between 2011-2021.

Results:

Simply offering price transparency tools to patients did not significantly increase their use. Tool use is higher among young consumers, those with higher medical spending, and groups that are more likely to have Internet fluency, such as younger employees and those from higher income areas. The use of comparable prices was also dependent on the type of service: patients mostly searched for services that included labs, imaging, and outpatient procedures, compared to changing providers. Patients identified salience in searching for price information, and quality and loyalty to current providers, as further barriers to price shopping for care.

Conclusions:

There is a disconnect between consumer’s interest in shopping for comparable prices and their use of price transparency tools. Identified barriers to their use included the type of service offered, internet fluency, age, and salience of price information. Addressing these barriers can improve the use of price transparency tools in future initiatives, and empower patient’s to combat price variation.



Thomas, Alexandria^{1,2}

A Scoping Review on Homelessness in the Black Community during the COVID-19 Pandemic; a Content Analysis on Equity and Justice

Mentors: Shahrzad Bazargan-Hejazi, PhD^{1,2}, Mary M. Marfisee, MD^{1,2}
1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

With the well-established U.S. history of discriminatory housing patterns, the rise in home prices, and an increase in the Black-White wage gap many Black residents entered the pandemic vulnerable to eviction and homelessness. The COVID-19 pandemic has caused a high level of financial burden among people who were already economically marginalized and experiencing housing precarity.

Objective(s):

The objective of this study was to conduct a scoping review to fill in the information gap regarding the disproportionate financial strain of the COVID-19 pandemic on housing stability for Black communities.

Methods:

We conducted a scoping review and extracted data on study characteristics including ethnicity, pathways to homelessness, COVID-19 and homelessness, economic responses, future strategies, and an equity and justice assessment. This involved searching PubMed and other databases for eligible articles and screening said articles based on relevance as well as our inclusion and exclusion criteria.

We conducted a scoping review and extracted data on study characteristics including ethnicity, pathways to homelessness, COVID-19 and homelessness, economic responses, future strategies, and an equity and justice assessment. This involved searching PubMed and other databases for eligible articles and screening said articles based on relevance as well as our inclusion and exclusion criteria.

Results:

Of the 231 studies selected for screening only 3 studies were focused on the economic insecurity due to COVID-19 for Black communities or communities of color. Additionally, the most commonly described paths to homelessness due to COVID-19 were record unemployment rates and wage loss. Impressively majority of the studies mentioned future strategies for prevention and integrated health equity and social, racial, or health justice.

Conclusions:

There are a limited number of studies in the literature regarding homelessness in the Black community as a result of COVID-19. Our limited findings suggest that in addition to the historic systemic barriers to adequate jobs and affordable housing, many Black residents are now facing job loss and financial insecurity putting them at increased risk for homelessness. The development of new economic strategies rooted in equity and justice will limit the displacement of Black residents due to COVID-19.



Thomas, Michelle ^{1, 2}

Development of a COVID-19 Biweekly Digest

Mentors: Tony Kuo, MD, MSHS ²

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background:

More than 27 million cases of COVID-19 have been diagnosed in the United States, with more than 400,000 COVID-19 related deaths reported. As a state, California has been highly impacted with about 3.4 million confirmed COVID-19 cases and approximately 48,000 deaths to date. As a county, Los Angeles - home to about 10 million individuals - has also experienced a high volume of positive cases with approximately 1.1 million COVID-19 cases and about 19,000 COVID-19 related deaths reported. Besides impacting health, the pandemic has also impacted the employment sector, the educational system, and the US economy. In addition, COVID-19 has highlighted and heightened existing health disparities, with the disease disproportionately affecting communities of color in the United States.

Objective(s):

Developed a series of biweekly COVID-19 digests summarizing latest key research related to COVID-19.

- Informed county responses to health impacts of COVID-19.

Facilitated culturally-sensitive responses to health impacts of COVID-19.

Methods:

Conducted literature reviews from September 28, 2020 to ongoing with focused key terms using reputable online database sources, and attended Clinical Translational Science Institute (CTSI) Science Team meetings.

Results:

Developed six COVID-19 digest issues which were disseminated to a group of Los Angeles County Public Health researchers involved in work related to COVID.

Conclusions:

Responding appropriately to the COVID-19 pandemic, which includes testing and vaccination efforts, requires a multifaceted and multidisciplinary approach. Accurate and trustworthy information coming from trusted culturally-competent and/or racial-concordant messengers, such as community leaders and clinicians, may help reduce impact of COVID-19, particularly within communities of color.



Villanueva, Paulina^{1,2}

Evaluating the Role of Healthcare Access on Prenatal Vaccination Rates in the U.S.

Mentors: Annette Regan, PhD, MPH², Shahrzad Bazargan-Hejazi, PhD^{1,2}
1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Introduction:

Pregnant women are at an increased risk of hospitalizations from influenza. It has been reported that there is a difference in vaccination rates among pregnant women who are privately insured versus publicly insured. We compared vaccination rates for influenza and Tdap against nine different health insurance types to identify differences in vaccination rates among various health insurances.

Methods:

We used the Phase 8 (2016-2018) Pregnancy Risk Assessment Monitoring System (PRAMS) dataset which included 52,247 respondents with information on influenza and Tdap vaccination. We assessed: 1) fully vaccinated (flu + Tdap), 2) partially vaccinated (Flu or Tdap), 3) unvaccinated (no flu or Tdap). We categorized insurance status during pregnancy into nine levels including private, Health Care Exchange, Medicaid, SCHIP/CHIP, other government, military insurance, Indian Health Services (IHS), other insurance, or no insurance.

Results:

Pregnant women insured by Medicaid had 32% lower odds of being fully vaccinated (aOR 0.68, 95% CI 0.58-0.80) compared to privately insured. Those insured via Health Care Exchange had 38% lower odds of being fully vaccinated (aOR 0.62, 95% CI 0.49-78). Similarly, those with other government insurance (aOR 0.55, 95% CI 0.38-0.78), other insurance (aOR 0.60, 95% CI 0.44-0.81) and no insurance (aOR 0.30, 95% CI 0.24-0.39) were less likely to be fully vaccinated when compared to private insurance. When looking at women who had a change in insurance status during their pregnancy, those who became uninsured (aOR 0.52, 95% CI 0.36-0.63), became publicly insured (aOR 0.78, 95% CI 0.65-0.93) and those who remained uninsured (aOR 0.28, 95% CI 0.19-0.42) had lower odds of being fully vaccinated when compared to those who maintained the same health insurance during their pregnancy.

Conclusion:

We identified disparities in vaccination rates for influenza and Tdap during pregnancy based on health insurance type.

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