



*Charles R. Drew University of
Medicine and Science*

*Medical Student Research
Colloquium
Current Research in Health
Disparity*

Class of 2020

February 28, 2020

AGENDA

7:30 – 8:30 a. m. *Continental Breakfast in the Keck Building Courtyard*

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 Vice President's Welcome*

Jaydutt V. Vadgama, PhD

Vice President for Research and Health Affairs

8:55 a. m. *The Dean's Welcome*

Deborah Prothrow-Stith, MD

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

9:00 – 11a. m. *PRIME- MD/Master, Global Health Research, Research Scholarship Presentations and Plenary Session*

11 – 11:15 a. m. *Morning Break*

11:15 – 12:15 p. m. *Student Presentations (Morning Session, cont.)*

12:00 – 1:30 p. m. *Lunch in the Student Lounge of the Cobb Administration Building*

1:30 – 3:00 p. m. *Student Presentations (Afternoon Session.)*

3:00 – 3:15 p. m. *Afternoon Break*

3:15 – 5:00 p. m. *Student Presentations (Afternoon, Cont.)*

5:00 – *Closing Remarks*

Shahrzad Bazargan-Hejazi, PhD

Students, judges and moderators are asked to remain after Closing Remarks for group photos.

Faculty Moderators



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.



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.

Faculty Judges



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.



Linda G. Baum, MD, PhD

Dr. Baum is currently Professor and Vice Chair of the Dept. of Pathology and Laboratory Medicine, and Associate Dean for Medical Student Research and Scholarship at DGSOM. She has served on the FASEB Committee on Excellence in Science, the scientific advisory board for the NIH-sponsored Integrated Technology Resource for Biomedical Glycomics, and on the editorial board of several journals.



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



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.



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.



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

Dr. Arleen F. Brown is a general internist and health services researcher with expertise in quality of care for older adults and minorities with diabetes. She has focused 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.



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.



Efrain Talamantes, MD, MBA, MSHPM

Dr. Talamantes is the Associate Director, Center for Reducing Health Disparities; Associate Director, Internal Medicine Residency Program and an Assistant Professor at University of California, Davis. He is a former Fellow in the NIH-funded Ruth L. Kirschstein National Research Service Award (NRSA) program and a former Scholar in the Robert Wood Johnson Foundation (RWJF) Clinical Scholars Program in the Department of Medicine, David Geffen School of Medicine at UCLA. He is a bilingual (Spanish-English) researcher is interested in conducting research that focuses on kidney transplant disparities in aging minority populations.



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.



Ambriz, Marvin^{1,2}

Trends in Pressure Ulcer/Injury Hospitalizations in the United States from 2005-2014 Mortality

Mentors: Chizobam Ani, MD, MPH, PhD

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

Background: In the US, pressure ulcers (PU) affect ~2.5 million people, and cost ~\$25 billion annually. African Americans (AA) and Latinos are disproportionately affected by PU. Factors including; chronic medical conditions, long term physical disability, psychosocial and economic factors affect the onset and care outcomes associated with PU. Few studies have examined trends in PU outcomes using a large representative US sample.

Objective(s): To examine racial/ethnic disparities in PU hospitalizations, mortality, and length of hospital stay (LOS) in the US. Trends in these outcomes were also examined from 2005-2014.

Methods: Secondary analysis of the Nationwide Inpatient Sample (NIS) was conducted. The NIS dataset is a stratified 20% sample of all non-Federal, short-term, general, and specialty hospitals serving adults in the US that is post-stratified to represent all US hospitalizations. A weighted sample of 10,305,812 PU hospitalizations was utilized. Statistical analysis: descriptive, X^2 , test, multivariable, linear, and logistic regression analysis was used to examine trends in PU hospitalizations, LOS, and mortality. Furthermore, these outcomes were examined among AA and Latinos compared to Whites. Trends in common PU procedures were also examined.

Results: Primary PU hospitalizations were commonest among ≥ 65 years, females, whites, and Medicare insured. From 2005 – 2014 there was a decrease in PU hospitalizations (11.55 – 7.77; $P < 0.001$). Mortality, LOS, and inflation adjusted cost also decreased ($P < 0.0001$). PU hospitalization mortality was highest for ≥ 75 years (OR, 11.18, $P < 0.0001$). Being AA or Latino was not associated with increased mortality, though AA had decreased LOS (β , -0.38; $P < 0.0001$), and higher hospitalization costs (β , \$4,757; $P < 0.0001$). Latinos had higher hospitalization costs (β , \$6,534; $P < 0.0001$).

Conclusion: PU hospitalizations in the US increased, while mortality, LOS, and cost decreased from 2005 – 2014. While LOS has decreased for AA, cost has increased.



Arteaga, Elvis^{1,2}

Adverse clinical outcomes and trends associated with malignant hypertension among individuals with hypertension in the United States from 2005-2014.

Mentors: Chizobam Ani, MD, MPH, PhD

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

Background: Hypertensive emergency formally termed malignant hypertension is elevated blood pressure above 180/120 with evidence of end organ dysfunction, including cerebrovascular, cardiovascular, renal, ophthalmological and neurological damage. In the past two decades, there has been significant advances in both awareness and therapeutic management for hypertension. The impact of these advances on hospitalization outcomes remains unclear.

Objective(s): Examine adverse clinical outcomes and trends associated with malignant hypertension among individuals with hypertension in the US from 2005-2014.

Methods: Secondary data analysis of the Nationwide Inpatient Sample. NIS is designed to approximate a stratified 20% sample of all non-Federal, short-term, general, and specialty hospitals serving adults in the United States. Analysis was conducted in a weighted sample of 24,535,080 hypertension hospitalization events. Statistical analysis descriptive, bivariate analysis using Rao-Scott χ^2 , T-test, multivariable logistic and linear regression analysis to test the relationship between malignant hypertension and length of stay, mortality, myocardial infarction, heart failure, subarachnoid hemorrhage, intracerebral hemorrhage, transient cerebral ischemia, hypertensive encephalopathy, aortic aneurysm and dissection, hypertensive retinopathy, and disorder of kidney and ureter.

Results: Majority of hospitalization for malignant hypertension were among older adults greater than 65 years (55.4%), female (60%), white (63.79%), Medicare insured (58.65%). The odds of end organ dysfunction were significantly higher for malignant hypertension compared with non-malignant hypertension especially for hypertensive encephalopathy (OR 24.24), ICH (9.24), SAH (5.28), HR (4.79), aortic aneurysm and dissection (1.53) and acute MI (1.40). From 2004 to 2015 there was an overall increase in hospitalizations for malignant hypertension. (0.6954-1.9018, $P < 0.0001$). There was an overall increase in trend from 2005-2014 for all examined malignant hypertension complication ($P < 0.0001$) except for acute renal insufficient and cerebral ischemic events.

Conclusions: Despite advance awareness and therapeutic management of hypertension trends and outcomes appear worse from 2005-2014. Further studies and interventions to address this are essential.



Avila-Garibay, Fernando^{1,2}

Language Access in the Emergency Department The Patient's Perspective

Mentor: Breena Taira MD, MPH³, Hemang Acharya, MD³

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

Background: Of the 61.6 million immigrants identified on the 2013 U.S. Census, 41% are considered of Limited English Proficiency (LEP). Despite legal mandates defining appropriate interpreter services, LEP patients report a high degree of miscommunication during medical encounters. There is a large body of literature describing the resulting health harms, including incorrect diagnoses, over-testing, and medication errors.

Objectives: To assess the rate of emergency department (ED) patient knowledge of discharge instructions immediately post-discharge from the ED.

Methods: An anonymous survey was conducted in a public ED, using a convenience sample of English-speaking and LEP patients being discharged from the ED. Assessed variables included age, ethnicity, language preference, education, and knowledge of discharge diagnosis, prescriptions, and follow-up plan. Descriptive statistics were employed to analyze the data.

Results: Preliminary data shows that of 200 individuals approached, 192 agreed to participate (96.0% response rate), with 41.2% (79/192) of interviews in English and 58.9% (113/192) in Spanish. Mean age was 46.5 years. 47.4% (91/192) of patients were of Mexican origin, 19.8% (38/192) were Central American, and 17.2% (33/192) were Not Hispanic/Latino. 56.8% (109/192) of patients were characterized as LEP, defined as speaking English less than “very well” on a 4-point Likert Scale, of which 100.0% (109/109) reported Spanish as their preferred language. Preliminary results demonstrate that at time of discharge, 23.9% (27/113) of LEP patients correctly identified no more than one of three discharge instructions, compared to 13.5% (10/74) of English-speaking patients. 76.1% (86/113) of LEP patients correctly identified at least two of three discharge instructions, compared to 86.5% (64/74) of English-speaking patients.

Conclusion: A high percentage of LEP patients failed to correctly identify more than one of three discharge instructions. Language access efforts in the ED must aim to identify and address communication and language gaps to improve patient knowledge of discharge instructions.



Cargle, Melanie ^{1,2}

Utilization of Compound Annual Growth Rates Evaluates Gender-based Employment Trends among ACGME-accredited Orthopaedic Surgery Residencies, 2007-2017.

Mentor: Jennifer Weiss, MD ³

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

Background: Orthopaedic surgery has historically been a male-dominated specialty. In recent years, strides have been made to diversify orthopaedics to better reflect the wide range of patients in the general population. Objective metrics utilized in the business world—such as compound annual growth rate (CAGR)—can be used to track quantitative changes in gender diversity.

Objective(s): To calculate national 10-year compound annual growth rates of women gainfully employed by American College of Graduate Medical Education (ACGME)-accredited orthopaedic surgery residencies from 2007-2017; develop a geographic map that illustrates statewide 10-year CAGRs; and highlight states with CAGRs at or above the 75th percentile and at or below the 25th percentile.

Methods: An external data request was submitted to the American Association of Medical Colleges (AAMC) regarding residents employed at ACGME-accredited orthopaedic surgery residency programs in the United States from 2007-2017 were stratified by program location and gender. The statewide and national CAGR for women residents were calculated. A diverging 3-color distribution map was generated to illustrate the 10-year CAGR for 2007-2017. Ten year CAGRs were further stratified by quartiles.

Results: The national CAGR for women employed by ACGME-accredited orthopaedic surgery residencies in the United States was 4.5% between 2007-2012, 4.0% between 2012-2017, and 4.2% between 2007-2017. Nine of 38 states were $\geq 75^{\text{th}}$ percentile; nine of 38 states were $\leq 25^{\text{th}}$ percentile.

Conclusion: The population of women orthopaedic surgery residents has shown minimal rate of growth over the last 10 years. Continued efforts should be made to diversify the field of orthopaedics through targeted recruitment and gainful employment of qualified women applicants.



Carter. Devon^{1,2}

The Influence of Obesity on Unplanned Hospital Admission after Ambulatory Ankle Surgery

Mentor: Rodney A. Gabriel, MD, MAS^{3,4}; Brittany N. Burton, MD, MHS, MAS⁵

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA. 3. UC San Diego Health, Department of Biomedical Informatics. 4. UC San Diego School of Medicine 5. UCLA Department of Anesthesiology and Perioperative Medicine

Background: Inpatient ankle fracture surgical procedures have risen to represent a significant economic burden to overall health care costs - ultimately increasing interest in outpatient orthopedic surgery. Unplanned hospital admission (UHA) has become a popular marker of quality patient care following outpatient surgery. Higher body mass index (BMI) has reportedly increased the risk of complications and UHA following orthopedic surgery. However, these reports are limited to the context of hip and knee surgery, suggesting the need to examine similar outcome measures in outpatient ankle surgery.

Objective: We examined the association of body mass index (BMI) with sociodemographic data, medical comorbidities and unplanned hospital admission following ambulatory ankle surgery.

Methods: This study is a retrospective multi-institutional cohort study utilizing data from the American College of Surgeons National Surgical Quality Improvement Program database from 2007 to 2016. The subjects included were adult patients who underwent ankle surgery in the outpatient setting. We examined 6 BMI ranges. The primary outcome was unplanned hospital admission. We performed multivariable logistic regression and reported odds ratios and their associated 95% confidence interval and considered a p-value of <0.05 as statistically significant.

Results: Data extraction yielded 12,729 after excluding 5.4% of patients. The overall rate of unplanned hospital admission in the population was 18.6% while postoperative complications was 0.03%. Multivariable logistic regression analysis of body mass index with hospital admission was not statistically significant ($P > 0.05$): <20 kg/m² (OR = 0.80, 95% CI = 0.54-1.16), 20-24kg/m² (OR = 1.03, 95% CI = 0.90-1.19), 25-29kg/m² (OR = 1.05, 95% CI = 0.93-1.17), 40-49kg/m² (OR = 1.19, 95% CI = 0.99-1.43), >50 kg/m² (OR = 1.22, 95% CI = 0.82-1.79).

Conclusions: We found no significant association of BMI with unplanned hospital admission. We recommend that BMI alone should not be solely used to exclude patients from having ankle surgery performed in an outpatient setting, especially since this patient group makes up a significant proportion of orthopedic surgery.



Craddock, Marquell^{1,2}

A Mixed-Methods Evaluation of a University Campus-Based Diabetes Prevention Program (DPP): Early-phase Assessment of Program Barriers, Facilitators, and Effectiveness

Mentors: Obidiugwu Kenrik Duru, M.D., MSHS^{1,2}

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

Background: The Centers for Disease Control and Prevention (CDC) is advocating a national effort to prevent type 2 diabetes by translating the evidence-based Diabetes Prevention Program (DPP) at the community-level, including workplaces, faith-based communities, and social organizations. However, few studies document early-implementation efforts in institutions of higher education, specifically at the University campus-level.

Objectives: 1) to identify facilitators and barriers to early-phase DPP implementation at a large University. 2) To evaluate quantitative differences in DPP effectiveness as measured by weight loss and level of participation among University students, faculty, patients, and staff enrolled in the DPP.

Methods: This was a mixed-methods study approach. Cross-sectional semi-structured interviews were conducted with DPP participants (n=3), and program staff and leadership (n=5). Transcribed data were thematically analyzed using NVivo 12 software. The primary study outcome was achieving a 5% loss of total body weight, and the secondary outcome was attending nine or more sessions within the first six months of DPP enrollment. We analyzed the data using hierarchical logistic regression, adjusting for participant age, gender, and ethnicity.

Results: DPP staff and leadership identified challenges to program sustainability relating to 1) recruiting students and 2) covering program cost through medical insurance. DPP participants shared the need for 1) adding exercise and peer-support groups, 2) personalizing the DPP curriculum, and 3) having long-term access to DPP resources beyond the required sessions. We analyzed weight loss and attendance data for 175 University-based DPP participants. Faculty were found to significantly have lower odds of attending program sessions compared to patients (OR = 0.155; 95% CI = 0.036 - 0.663). Otherwise, there were no observed significant differences in weight loss or the level of participation between students, faculty, staff, and patients.

Conclusions: There is a statistically significant association with faculty and fewer DPP sessions attended when compared to patients. Our work represents an initial effort to assess the implementation of University-based DPP programs, examining potential facilitators and barriers in this area. The next steps include addressing various implementation challenges identified by stakeholders in terms of recruitment and supplementary resources.



Ferguson, Frederick ^{1,2}

Marginalization-related Diminished Returns (MDR): A Systematic Review of the Literature

Mentor: Shervin Assari, MD, MPH ²

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

Background: Marginalized-related Diminished Returns (MDRs) (Assari 2017) refer to smaller effects of socioeconomic status (SES) on health outcomes of socially marginalized compared to the privileged groups.

Objective(s): To review the MDRs literature and discuss policy solutions.

Methods: This was a systematically review of all MDRs published literature, in Pubmed, Pubmed Central, Embase, and Google Scholar.

Results: Overall, 90 papers were found. Most papers had used nationally representative data that generated generalizable results to US. Local studies had replicated MDRs in Michigan, California, and Iowa. Most of the studies were on adult samples; followed by youth, children, and older adults. Although most papers were cross sectional, some research has documented MDRs over time. While most of this literature was within the individuals, considerable evidence exists regarding transgenerational MDRs. MDRs are reported for anxiety, depression, suicide, self-rated health, obesity, body mass index, chronic disease, disability, smoking, drinking, exercise, diet, impulsivity, school outcomes, health service use, hospitalization, and mortality. Similar patterns were found for Blacks, Latinos/Hispanics, Native American's, Asian Americans, LGBT Community, and marginalized Whites. However, MDRs were most pronounced for Blacks, particularly Black men.

Conclusions: MDRs are robust and remain across resources, outcomes, populations, age groups, cohorts, settings, and designs. Thus, MDRs are not due to the behaviors of the individuals but the society. Thus, we should not blame the marginalized groups but the society. Policy solutions should go beyond equalizing access to SES resources as resources tend to generate fewer outcomes for marginalized people. Policies that merely emphasize universal enhancement of access to resources may unintentionally increase rather than decrease health disparities. Policymakers should be aware that marginalized communities may under-utilize the resources that become available to them. This highlights a need for combining policies with adjunct programs that are designed to help marginalized people to more effectively utilize new resources.



Gibbs, Lauren^{1,2}

Preeclampsia-Related Outcomes of Aspirin Prophylaxis in Black Women in La County

Mentors: Sebhat Afework, MD, FACOG^{1, 2}; Madga Shaheen, MD, MPH, PhD^{1, 2}

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

Background: The US Preventative Services Task Force recommends daily low-dose aspirin use during pregnancy for women at high-risk for preeclampsia. However, there is a paucity of data regarding its effectiveness in black women, who are at disproportionate risk of developing preeclampsia and suffering severe morbidity.

Objective:

- Estimate the prescription of aspirin prophylaxis in high-risk black women in Los Angeles County Department of Health Services system during pregnancy
- Estimate early versus late initiation of aspirin in these women
- Determine the association of aspirin prophylaxis with adverse outcomes in these women.

Methods: This was a retrospective chart review of patients who delivered between January 2018 and May 2019. Black women age ≥ 18 with ≥ 1 high-level risk factor: history of preeclampsia, multifetal gestation, chronic hypertension, type 1 or 2 diabetes, renal and/or autoimmune disease were included. The main outcome variables were preterm preeclampsia, intrauterine growth restriction (IUGR), preterm birth. Potential confounders were accounted for in multivariate analyses, and odds ratios were calculated.

Results: Eighty two (n =82) women met inclusion criteria; 52.4% received prophylaxis and 53.5% of those women received early initiation (<16 weeks). Overall, 45.1% experienced an adverse pregnancy outcome (preeclampsia, IUGR, preterm birth). There was no statistically significant difference in outcomes after aspirin was prescribed and no difference in outcomes after early initiation. However, having 2 or more high risk factors was associated with documented adverse pregnancy outcomes.

Conclusions: There was a low percentage of aspirin prescription in these women. In addition, this study found no association between aspirin prophylaxis and adverse pregnancy outcomes in black women. However, having 2 or more high-level risk factors is a predictor for experiencing adverse pregnancy outcomes. Future studies should include direct measures of aspirin adherence, increase sample size, and explore factors related to low prescription percentage.



Gordon, Wesley ^{1,2}

LDCT Lung Cancer Screening in Underserved Populations: A Pilot Study of Attitudes and Knowledge

Mentor: Kathleen Brown, MD ²

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

Background: Lung cancer is the leading cause of cancer-related deaths in the United States, and accounts for more than 150,000 deaths annually. Despite recent recommendations for LDCT screening for lung cancer in high-risk patients, lung cancer screening implementation lags far behind screening tests for other cancers.

Objective(s): To assess the attitudes of healthcare professionals towards lung cancer screening as well as perceived barriers to screening. Provide information to healthcare professionals at Martin Luther King (MLK) outpatient center about lung cancer screening benefits, harms, and patient eligibility.

Methods: We coordinated with leadership at MLK Outpatient Center. Thoracic Radiologists from UCLA gave two presentations to healthcare professionals at MLK outpatient center. Attendees were asked to complete a pre-lecture survey as well as a post lecture survey to gauge their attitudes on lung cancer screening. The surveys used Likert scales from 1-5.

Results: Before the lecture, providers identified many barriers to lung cancer screening including patient education, provider knowledge of screening, and DHS resources. Confidence referring patients for lung cancer screening improved among the providers post lecture. In addition, providers also felt that they would be able to implement changes in their clinical practice based on the education they received.

Conclusions: Our findings suggest that the barriers to lung cancer screening related to the knowledge and familiarity of healthcare professionals could be overcome with training and practical discussions about the topic



Harley, Dushawn^{1,2}

An Evaluation of Adipose-Derived Stem Cell Quantity in Infrapatellar Fat versus Subcutaneous Lipoaspirate – A Pilot Study

Mentor: Kang HP, MD³, Harley D, MD³, Sugiyama O, MD³, Robertson D, MD³, Vakhshori V, MD³, Lieberman JR, MD³.

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA. 3. USC/Keck School of medicine

Background: Adipose tissue provides a rich and abundant supply of adipose-derived mesenchymal stem cells (MSC) that can be readily manipulated for tissue-engineering purposes. However the quality of cells derived from various sites may vary and is largely uncharacterized.

Objectives: To compare the quality and quantity of the stem cell population of infrapatellar fat pads versus subcutaneous fat.

Methods: Subcutaneous adipose tissue was obtained from cosmetic liposuction procedures (n=3). Infrapatellar fat was obtained from patients undergoing elective primary total knee arthroplasty (n=5). Cells were isolated by mechanical and enzymatic homogenization followed by centrifugation. The stromal vascular fraction was retained as the potential stem cell population. The yield was then quantified, and 200 cells were plated in triplicate and cultured. Crystal violet colony-forming unit (CFU) assay was used to quantify the stem cell population in the plates.

Results: Lipoaspirate from cosmetic procedures yielded an average of 500mL of tissue yielding $4.2 \times 10^7 \pm 8.6 \times 10^6$ cells in the SVF. Infrapatellar fat provided an average of 12.6mL of tissue with $1.0 \times 10^7 \pm 6.6 \times 10^6$ cells in the SVF. CFU assays were performed for both groups. Within the lipoaspirate group, the mean number of CFUs was 2.61 ± 1.42 per plate, while in the infrapatellar group, the mean number of CFUs was 45.0 ± 28.9 per plate (p=0.049). This extrapolates to approximately 1.1×10^3 and 1.8×10^5 stem cells per mL of tissue sample in the lipoaspirate and infrapatellar groups, respectively.

Conclusion: Although lipoaspirate is an attractive method to harvest adipose cells, due to both the ease of procedure and sheer quantity of obtained tissue, the viable number of MSCs obtained from this procedure is significantly lower compared to infrapatellar fat. Infrapatellar fat is routinely resected during many orthopaedic procedures and may offer a superior option for stem cell therapy.



Isidro, Claire^{1,2}

Is Family Function Related To Increased Risk of Suicide And/or Depression In LGBTQ (Lesbian, Gay, Bisexual, Transgender, And Queer) Patients?

Mentors: Shahrzad Bazargan-Hejazi, PhD

Madeleine Valencerina, MD

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

Background: LGBT persons are at a three times increased risk of mental health conditions such as depression, anxiety, and PTSD compared with heterosexual and cisgender peers. Forty percent of transgender youth have attempted suicide in their lifetime, which is nine times the attempted suicide rate in the U.S. population (4.6%). Even with these statistics, little attention has been given to the problem of mental health disorders LGBT face.

Objective: To summarize how family acceptance, and the bonding relationships in family members, is likely one of the most important protective factors in LGBT's health and well-being.

Methods: This was a systematic review of the peer-reviewed articles published since January 2000 to the present, which addressed the role of family acceptance in mental health of sexual and gender minorities. Our search included PubMed and Google Scholar databases. Search terms inquiries included: "family", "family acceptance" AND "support" AND "sexual and gender minorities" OR "LGBT" AND "mental health". We used PRISMA checklist and flowchart to guide and enhance the transparency and credibility of our search.

RESULTS: Sixteen articles met the research criteria. All 16 articles supported the idea that LGBT individuals who felt accepted and supported by their families were less likely to suffer from mental health disorders. Additionally, all 16 articles supported the idea that family acceptance is significantly associated with better mental health outcomes.

CONCLUSIONS: Our findings suggest family acceptance could protect lesbian, gay, bisexual, and transgender individuals from experiencing mental disorders, and could indeed, enhance their wellbeing. Providers that serve this population should help educate families about the impact of their accepting behaviors.



Jones-Linares, Brittany^{1,2}

Whether it is Hailing Mary or Playing Russian Roulette: Surveying Provider's Knowledge and Attitudes about the Withdrawal Method of Contraception

Mentors: Anita Nelson, MD^{2,3}; Jasmine Patel, MD⁴

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA. 3. Western University Health Sciences. 4. Keck School of Medicine of USC

Background: Withdrawal method is often perceived as an ineffective contraceptive method that is infrequently discussed by clinicians, despite its ubiquitous use and an efficacy level similar to female condoms. It is also one of the few methods available to men.

Objective: To address this discrepancy, we surveyed the knowledge and the attitudes of women's healthcare providers about the withdrawal contraceptive method.

Methods: In this IRB-approval, exempt descriptive study, surveys were distributed at four different education conferences across the United States. As part of a 16-item survey with open and close-ended questions, providers were asked about the effectiveness of withdrawal for pregnancy prevention, as well as if and how they discussed withdrawal with their patients. Free-responses were analyzed for content and coded with 80% interrater reliability. Distribution frequencies and associations via Pearson's chi-square tests were performed.

Results: Overall, 17.7% and 2% of respondents correctly answered the free-response questions for typical and perfect use failure rates for withdrawal, respectively. When asked how they would respond if their patient-reported using withdrawal for contraception, half (55.3%) provided responses suggesting open-mindedness, compared to other healthcare providers, physicians were more likely to endorse negative attitudes about using withdrawal ($P < .01$). Half (51.1%) of providers do not list withdrawal as a method choice on their reproductive history intake forms; only one-third (33.3%) routinely ask about this method.

Conclusion: Overall, providers demonstrate low knowledge of the efficacy rates of withdrawal. The majority of providers are open-minded about counseling their female patients on the method, but many do not directly ask their patients if they use it. Better education about withdrawal and its efficacy as a contraceptive method are recommended for practitioners to recognize the importance of its inclusion in their counseling, as well as to provide their patients with the data needed to make informed contraceptive choices.



McKenzie, Shanice^{1,2}

Disparities in Access to Medical Dermatology Care in Los Angeles County: A Geospatial Cross Sectional Study

Mentor: Justine Seivright, BS²; Sarmen Hakopian, BA²; Stefanie Vassar, MS²; Jennifer Hsiao, MD²; Arleen Brown, MD, PhD²; Melvin Chiu, MD, MPH³

1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA 3. Keck School of Medicine, University of Southern California

Background: There is a geographic maldistribution of dermatologists, leaving low income and minority populations with limited access to dermatology care. Disparities in access to health care in Los Angeles (LA) County have been well characterized by geographically defined Service Planning Areas (SPAs).

Objective: To investigate the geographical, wait time, and insurance barriers to accessing medical dermatology services in LA County.

Methods: In this cross-sectional study, a directory of all practicing dermatologists in LA county (n=395) was acquired from infoUSA (R). From June 2018 to March 2019, investigators placed scripted phone calls, assuming the role of a new patient seeking an appointment. Information on the number of dermatologists and physician extenders in each office, wait time for new patient appointments, and Medi-Cal acceptance was collected. Descriptive and bivariate statistics were calculated and p-values <0.05 were considered statistically significant.

Results: A total of 251 outpatient offices responded to the scripted phone call in SPA 1, Antelope Valley (n=4), SPA 2, San Fernando Valley (n=56), SPA 3, San Gabriel Valley (n=35), SPA 4, Metro LA (n=17), SPA 5, West LA (n=88), SPA 7, East LA (n=10), and SPA 8, South Bay (n=41). There was the greatest density of dermatologists in SPA 5 (26.1 per 100,000 residents), compared with SPA 1 (1.53), SPA 2 (5.70), SPA 3 (2.81), SPA 4 (2.10), SPA 7 (1.37), and SPA 8 (5.35). There was a statistically significant difference between SPA 5 and SPA 7 (p<0.001). Overall, there was a mean of 15.3 day wait for a dermatologist appointment with no geographical association (p=0.26). Time to see a physician extender varied by SPA, ranging from 4.6 days in SPA 3 to 27 days in SPA 1 (p=0.002). Medi-Cal was only accepted by \leq 30% of offices across all SPAs.

Conclusions: The results of this study highlight multiple geographic disparities in accessing dermatology care in LA County. Further investigation is needed to explore disparities in other parts of the U.S. and to address the geographic inequitable distribution of dermatologists.



Michel, Joaquin^{1,2}

Improving Shared Decision-Making in Latino Men with Prostate Cancer: A Thematic Analysis

Mentors: Mark S. Litwin, MD, MPH²

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

Background: Multiple studies have shown that digitally-mediated decision aids help prepare patients for medical decision making with their providers. However, few studies have investigated whether decision-support preferences differ between non-English- and English-speaking Latino men with limited literacy.

Objective: To identify patterns of health information seeking, preferences for information presentation (i.e., visual, written), and willingness to use digital decision aids by underserved Latino men newly diagnosed with prostate cancer at a county hospital in California.

Methods: We conducted semi-structured, in-depth telephone interviews with twelve Spanish-speaking and eight English-speaking Latino men. Following transcription of taped interviews, Spanish interviews were translated. Using a coding protocol developed by the team, two bilingual members jointly analyzed the transcripts for emerging themes. Coder agreement exceeded 80%. Differences were resolved through discussion.

Results: Thematic differences between groups with different language skills emerged. A majority of the respondents engaged in online health information seeking (primarily) using cellphones, perceived a paternalistic patient-provider relationship, and expressed willingness to use a hypothetical digital decision aid if recommended by their provider. English speakers reported higher digital technology use for general medical and urological search purposes. They also more frequently indicated family involvement in digital search related to their condition and preferred self-guided, web-based decision aids. In comparison, Spanish speakers reported lower digital technology knowledge/use and preferred family-involved, coach-guided, paper and visual decision aids. English speakers reported substantially higher levels of formal education.

Conclusion: Preferences regarding the use of digital technology to inform prostate cancer treatment decision-making among underserved Latino men varied depending on preferred primary language. Effective preparation of underserved Latino men for shared decision-making requires consideration of alternative approaches depending on preferred primary language.



Molina, Alfonso^{1,2}

Liver Transplantation in Patients with Pre-transplant Aspergillus Colonization: Is It Safe to Proceed?

Mentor: Drew J. Winston, MD²

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

Background: Patients with end-stage liver disease and pre-transplant *Aspergillus* colonization are problematic for determining liver transplant candidacy and timing of transplantation due to concerns for post-transplant invasive aspergillosis.

Objective: To determine if pre-transplant *Aspergillus* colonization alone should preclude or delay liver transplantation.

Methods: We performed a retrospective review of the medical and laboratory records of all adult patients (≥ 18 years of age) who underwent liver transplantation with pre-transplant *Aspergillus* colonization at the Ronald Reagan UCLA Medical Center from January 1, 2010, to December 31, 2015.

Results: A total of 27 patients who had *Aspergillus* colonization (respiratory tract 26, biliary tract 1) before liver transplantation were identified. Pre-transplant characteristics included previous liver transplant (11/27, 40.7%), dialysis (22/27, 81.5%), corticosteroid therapy (12/27, 44.4%), intensive care unit stay (27/27, 100%), and a median MELD score of 39. Only 22.2% (6/27) received pre-transplant antifungal agents (median duration, 5 days), while 100% (27/27) received post-transplant antifungal prophylaxis (voriconazole 81.4%, 22/27; echinocandin 11.1%, 3/27; voriconazole plus echinocandin 3.7%, 1/27) for median duration of 85 days. Post-transplant invasive fungal infection occurred in 14.8% (4/27; aspergillosis 3, mucormycosis 1). Both 6-month and 12-month survival were 66.7% (18/27), but only one death was due to fungal infection. Other causes of death were liver graft failure, intraabdominal complications, and malignancy.

Conclusion: A substantial number of patients with pre-transplant *Aspergillus* colonization can still undergo successful liver transplantation if they are otherwise suitable candidates and receive appropriate antifungal prophylaxis. The post-transplant outcome in these patients is determined mostly by noninfectious complications and not a fungal infection. Pre-transplant *Aspergillus* colonization alone should not necessarily preclude or delay liver transplantation.



Montoya, Hector^{1,2}

San Joaquin Valley Physician Shortage Workforce Study

Mentor: Gerardo Moreno, MD^{1,2}, MSHS; Daniela Rangel, MD^{1,2}; Omar Mercado^{1,2}

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Background: By 2030, the supply of primary care physicians in California is projected to decrease. Demand is projected to increase due to population growth and the need for more health care services. In California, there is a critical geographical maldistribution of physicians among communities with longstanding physician shortages. Areas like the San Joaquin Valley (SJV) that are already experiencing a physician shortage are projected to experience further demand.

Objective: 1) to compare barriers and facilitators between primary care and specialists practicing in the SJV. 2) To identify physician motivations and report their suggestions on how to increase recruitment and retention of physicians practicing in the SJV.

Methods: This was a qualitative study with semi-structured in-depth personal or telephone interviews (n=20) of practicing physicians in the SJV. Snowball sampling was used to recruit study participants. Interviews were audio-recorded and transcribed verbatim. Transcriptions were analyzed using concepts from grounded theory to identify the most common domains and themes. Data from the transcriptions were grouped by demographic characteristics and further stratified by recurring domains.

Results: Of the participating physicians, 60% were practicing primary care. All SJV native physicians interviewed were Latino, with 75% of them practicing primary care. Of the most common motivational domains for practicing in the SJV, 95% of physicians cited *patient population*, 90% cited *location*. Only 15% of physicians interviewed utilized loan repayment programs. Study participant recommendations were similar to policy recommendations in the literature to improve physician recruitment and retention in underserved rural California.

Conclusions: The most frequent motivation to practice in the SJV was the *patient population*, followed by *location*. Latino physicians tended to practice Primary Care. Few physicians interviewed utilized or recommended loan forgiveness as a recruitment strategy. More research is needed to understand the unique geographical levers that will help recruit and retain physicians in specific underserved areas.



Moore, Kyasha^{1,2}

Racial Disparities in Pediatric Pain Management

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

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

Background: Many studies have demonstrated disparities in pain management between different racial and ethnic groups. This study explores whether these disparities are evident in the pediatric population.

Objective: To evaluate the recent literature on pain management disparities in children.

Methods: We conducted a systematic literature review of peer-reviewed articles published from 2005-2020 that focused on disparities in pain management in children. The MeSH keywords of pain management, child, infant, and health disparity were used to search PubMed. Fifty-three articles were found; studies were excluded if they investigated pain treatment by parents outside of the hospital, or if they were letters to the editor. International studies were also excluded due to the unique racial and social landscape in the United States. Thirteen studies were eligible for inclusion.

Results: This literature review yielded 13 studies that described disparities in pain management of children. Six studies demonstrated that non-Hispanic black children received less pain medication than white children. Five studies did not find a statistically significant association between race and pain management. Two studies found that black children received more pain treatment than white children. One study found that children from a higher socioeconomic group were more likely to receive pain treatment. Another found that older children were more likely than younger children to receive pain medication. A final study found that hospitals that serve a majority of black patients prescribed less pain treatment overall.

Conclusions: While several studies did not find a racial difference in treatment, this review highlights the continued disparity in the treatment of pain in non-white children. Few studies directly address racial disparities in pediatric pain management. Our results found that there are additional factors that should be considered when evaluating pain treatment. Further research that focuses on pain treatment disparities in the pediatric population is necessary to elucidate these health disparities fully.



Neal, Jasmin^{1,2}

Examining Differences in the Rates of Uninsured Cancer Patients and Markers of Improved Cancer Care in Relation to the Timing of the Affordable Care Act (ACA)

Mentors: Christine Dauphine, MD^{2,3}; Ashkan Moazzez, MD, MPH^{2,3}; Junko Ozao-Choy, MD^{2,3}; Beverley A. Petrie, MD^{2,3}; Kathryn T. Chen, MD^{2,3}

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

Background: Though the ACA is estimated to have provided 20 million additional Americans with health care coverage, the effects of this increased access to cancer care remain largely unknown.

Objective(s): To determine whether the implementation of the Affordable Care Act (ACA) in January 2014 correlated with subsequent reductions in the rates of uninsured patients with breast and colon cancer, and whether this was associated with earlier detection and/or quicker time to treatment.

Methods: Data for patients < 65 years were analyzed from the National Cancer Database (NCDB) from 2004 to 2016. The rates of uninsured patients with breast and colon cancer were analyzed over time and stratified by race, income, and Medicaid expansion. Time to initial treatment and the rate of early-stage cancer were also assessed for both cohorts.

Results: In 1,610,224 breast and 339,488 colon cancer patients, the rate of uninsured patients decreased significantly from pre-ACA levels (Breast: 3.6% to 2.4%; Colon: 9.6% to 6.7%), with the greatest relative increases in insurance coverage observed in Black, Hispanic, and low-income patients living in Medicaid Expansion states (Breast: 4.3% to 1.8% Black, 6.8% to 5.1% Hispanic, 5.0% to 2.0% Low-Income; Colon: 9.7% to 2.5% Black, 12.0% to 5.0% Hispanic, and 10.4% to 3.8% Low-Income). Insured patients had shorter times to treatment (Breast: 5 days; Colon: 1 day) and more low-stage cancers (Breast: 63% vs 45%; Colon: 27% vs 15%), but neither time-to-treatment nor early-stage at diagnosis demonstrated improvement in the 2-year available interval follow-up post-ACA.

Conclusions: Decreases in the rate of uninsured breast and colon cancer patients appear to coincide with ACA implementation, with ME effectively minimizing both racial and economic disparities. These results suggest that the ACA has successfully improved health insurance coverage, particularly in vulnerable populations, and over time may result in improved outcomes.



Pettway, Bria^{1,2}

Analysis of the Association between Intimate Partner Violence during Pregnancy and Birth Outcomes

Mentors: Anna Karina Celaya, MD^{1,2}, MPH, FACOG, Shahrzad Bazargan, PhD^{1,2}

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

Background: Intimate partner violence (IPV), defined as physical, sexual, or psychological harm by a current or former partner, disproportionately impacts women of reproductive age worldwide. IPV during pregnancy is increasingly recognized as a significant risk factor for adverse birth outcomes (ABO), specifically preterm birth and low birth weight. Although research has established IPV as a risk factor for ABO globally, there is little research on the prevalence of IPV and its association with ABO in Department of Health Services (DHS) Hospitals in LA County.

Objectives: To describe the association between IPV during pregnancy and ABO in DHS Hospitals in LA County.

Methods: Archived patient data from the Strong Start- MAMA'S Neighborhood program (2014- 2017) were analyzed using SAS 9.4 statistical software. Researchers applied Chi-square tests (significance at $p < 0.05$) to examine relationships between groups. Outcomes were stratified by race.

Results: Preliminary outcomes indicate no relationship between history of IPV and preterm birth, $X^2(1, N = 833) = 0.027, p = .87$, or low birth weight, $X^2(1, N = 1,187) = 0.326, p = .57$. There is, however, a marginally significant relationship between history of IPV and preterm birth for Black women in the sample, $X^2(1, N = 172) = 3.28, p = .07$. No statistically significant relationships between IPV and ABO exist among other races or ethnicities (White, Latina, Asian or Other).

Conclusions: Preliminary analyses reveal that there is not a relationship between history of IPV and ABO across all program participants. However, there is a potential association among Black women with history of IPV and ABO. Understanding this association can inform the development and implementation of intervention programs aimed to help reduce disparities in birth outcomes in DHS Hospitals in LA County.



Ruiz, Maria^{1,2}

Racial and Ethnic Disparities in Chronic Health Conditions among Women with a History of Gestational Diabetes Mellitus

Mentors: Shahrzad Bazargan-Hejazi, Ph.D.^{1,2}; Magda Shaheen, Ph.D., MPH, MS^{1,2}

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Background: Little is known about the risk of the development of chronic disease in women who have a history of gestational diabetes and its variation by race and ethnicity.

Objective(s): We aim to 1) examine the race/ethnicity disparity in chronic conditions in women who have been diagnosed with gestational diabetes mellitus (GDM) during any one of their pregnancies in the past. 2) To determine factors associated with chronic conditions in these women.

Methods: We analyzed the National Health and Nutrition Examination Survey (NHANES) from 2007 to 2016. We identified women who self-reported having been diagnosed with GDM in the past, and who had ever been diagnosed with chronic disease. Chronic conditions examined were cardiovascular disease, hypertension, depression, and type 2 diabetes mellitus. Bivariate analysis using the Chi-Square test and multiple logistic regressions were performed, taking into consideration the design and sample weight.

Results: Among participants with a prior history of GDM, Black women had the highest prevalence of chronic disease (74.4%). This followed by Whites (58.5%) and Hispanics (58.0%) ($p=0.009$). A higher prevalence of chronic conditions was found among those who were 45 years of age and older, born in the US, had a high school education or less, had low income, self-reported fair/poor health condition, and covered by insurance ($p<0.05$). The odds ratio of developing chronic conditions among Black women who had been previously diagnosed with GDM, was 2.40 (95% CI= 1.28-4.50). Additionally, being a former smoker (OR=1.73, 95% CI=1.01-2.96), current smoker (OR=1.96, 95% CI=1.06-3.61), having a BMI of 25-29.9 (OR=2.55, 95% CI=1.10-5.87), and a BMI ≥ 30 (OR4.09, 95% CI2.05-8.17) were also associated with an increased risk of developing chronic health conditions in women previously diagnosed with GDM.

Conclusions: Black women with GDM were disproportionately affected and had an increased risk of being diagnosed with any chronic condition compared to other racial/ethnic groups. Smoking and obesity increased the risk of developing chronic health conditions in all women in the study, suggesting meeting healthy behavior guidelines, especially, is important for this group and should be discussed by the primary care physicians.



Turner, Maurice^{1,2}

The Effect of a Comprehensive Dementia Care Management Program on End-of-Life Care

Mentors: David Reuben, MD²

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

Background: Although Alzheimer's disease and other dementias are life-limiting, only a minority of these patients or their proxy decision-makers participate in advance care planning.

Objective(s): We described end-of-life care preferences, acute care use, and hospice utilization in the last six months of life for persons enrolled in a comprehensive dementia care management program.

Methods: Advance care preferences, use of Physician Orders for Life-Sustaining Treatment (POLST), hospice enrollment, hospitalizations and emergency department (ED) visits in the last six months of life were obtained from electronic health record data for a total of 322 persons enrolled in dementia care management after July 1, 2012, who died before July 1, 2016.

Results: Nearly all decedents (99.7%, N = 321) had a goals-of-care conversation documented (median = 3 conversations; interquartile range = 2-4 conversations), and 64% had advanced care preferences recorded. Among those with recorded preferences, 88% indicated do not resuscitate, 48% limited medical interventions, and 35% chose comfort-focused care. Most patients (89%) specified limited artificial nutrition, including withholding feeding tubes. Over half (54%) had no hospitalizations or ED visits in the last six months of life, and intensive care unit stays were rare (5% of decedents). Overall, 69% died in hospice. Decedents who completed a POLST were more likely to die in hospice care (74% vs 62%; P = .03) and die at home (70% vs 59%; P = .04).

Conclusions: Enrollees in a comprehensive dementia care co-management program had a high engagement in advance care planning, high rates of hospice use, and low acute care utilization near the end of life. Wider implementation of such programs may improve end-of-life care for persons with dementia.



Williams, Dimeji ^{1,2}

Cardiac Sympathetic Denervation Outcomes by Ethnicity for Patients with Ventricular Arrhythmias

Mentors: Olujimi Ajijola M.D. Ph.D ²; Jeffrey Gornbein DrPH ²
1. Charles R. Drew University of Medicine and Science. 2. David Geffen School of Medicine at UCLA

Background: Cardiac sympathetic denervation (CSD) provides benefits in decreasing sympathetic output to the heart, thus decreasing this burden on the heart. Studies show that African-American (AA) patients have a higher risk of out of hospital sudden cardiac arrest (SCA) and lower chance of survival following in-hospital SCA.

Objective(s):

1. To understand if there is a disparity in health outcomes post-CSD by ethnicity for VA patients.
2. To determine if different avenues need to be taken in regards to treating different ethnic groups with recurrent VAs.
3. To understand if different ethnic groups are more likely to be lost to follow-up post-CSD.

Methods: This is a retrospective study with patients who underwent left or bilateral CSD at UCLA from 2009-2019. Patients (n = 93) include 10 African Americans, 4 Asian, 55 Caucasian, 19 Hispanic, five others. The primary outcomes are 1st VA recurrences and Death. Hazard rates per person-year of follow up, defined as the number of events divided by the total follow uptime, and are reported. To control for potential confounding, hazard rates were compared and adjusted using the Cox proportional hazard model.

Results: The overall median follow up time was 1.65 years. In regards to adjusted mortality rates per person-year, African Americans had the highest, followed by whites, followed by Asians & Others, and finally, Hispanics. In regards to adjusted 1st VT recurrence rates per person-year, Whites had the highest, followed by African Americans, followed by Hispanics, and finally Asians & Others. Median follow up was longest in African Americans (1.78 years) followed by Asian and Others (1.73 years), whites (1.65 years), and Hispanics (1.22 years).

Conclusions: Across all primary and secondary outcomes, there is no statistical significance in regards to comparisons between the ethnicities. A more extensive study using data from other hospitals that also perform CSDs is critical to compare the outcomes of this procedure amongst ethnic groups.

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