

Arnold School of Public Health
Department of Health Services Policy and Management
University of South Carolina

11th Annual James E. Clyburn Health Disparities Lecture

Poster Session & Abstracts

“We Can’t Wait - Health Equity Now”



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FRIDAY
April
6

Part of the 11th Annual
James E. Clyburn
Health Disparities Lecture
University of South Carolina
Alumni Center
900 Senate Street
Columbia, SC



UNIVERSITY OF
SOUTH CAROLINA
Arnold School of Public Health

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This year’s Poster Session and Abstracts booklet will showcase health disparities research and practice being conducted by faculty, postdoctoral research fellows, staff, and students at the University of South Carolina, as well as members from other local entities. The 11th Annual James E. Clyburn Health Disparities Lecture Poster Session is an opportunity for individuals to share their health disparities research and practice with others and address this year’s theme: *“We Can’t Wait - Health Equity Now”*.

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Poster Session Abstracts

Poster Session Abstracts Presented

- P01 Provision of Primary Care Nutrition Counseling Among South Carolina Children: Disparities by Weight Status and Sociodemographic Characteristics**
Author(s): Jennifer Mandelbaum, Sayward Harrison, Jordan Brittingham
- P02 Rural Substance Use Disorder Treatment Barriers and Facilitators in South Carolina**
Author(s): Rebecca L. Christopher, Teri M. Browne, Aidyn L. Iachini, Dana D. DeHart, Melissa C. Reitmeier & Andrew J. Flaherty
- P03 Using An Arts-Based Intervention to Increase Colorectal Cancer Knowledge**
Author(s): Daniela B. Friedman^{1,2}, Swann Arp Adams^{1,3,4}, Heather M. Brandt^{1,2}, Sue Heiney⁴, James R. Hebert^{1,3}, John R. Ureda⁵, Jessica Seel¹, Courtney S. Schrock¹, Wilhelmenia Mathias⁷, Vivian Armstead⁷, Reverend Vernetta Dees⁸, Reverend Perry Oliver⁸, Brooks Yelton¹
- P04 Disparities in Prescription of Cholesterol Lowering Drugs Among the Uninsured in the US**
Author(s): Shyamkumar Sriram, Zaina Querishi, Mahmud Khan
- P05 Racial Differences in Diabetes Diagnosis Among Women with Chronic Stress: Findings from the South Carolina Women's Survey**
Author(s): Jennifer Mandelbaum, Spencer Moore, Monique Lyle, Alexander McLain, Jason Stewart, Susan Heiney
- P06 Experiences of African American Men in South Carolina Between the Ages of 40 and 85 Living with Type 2 Diabetes**
Author(s): Anthony Q. Walker DPT, Christine Blake, PhD, Ken Watkins PhD, Justin Moore, PhD
- P07 Effect of Health Insurance on HIV Testing: Evidence from the National Health and Nutrition Examination Survey (NHANES) 2009 - 2014**
Author(s): Chamberline Ozigbu, MD, MPH; Bankole A. Olatosi, PhD, MS, MPH, FACHE; M, Mahmud Khan PhD
- P08 Exploration of Motivation Among African American Men and Perceptions of Healthcare Providers Regarding Management of Type 2 Diabetes Using a Self-Determination Theory Framework**
Author(s): Anthony Q. Walker DPT, Christine Blake PhD, Ken Watkins PhD, Justin Moore, PhD
- P09 Effective Recruitment Strategies for Enrolling African American Adults in Nutrition Intervention Research Studies**
Author(s): Mary Wilson, Gabrielle Turner-McGrievy, Anthony Crimarco, Sara Wilcox, Edward Frongillo, Angela Murphy
- P10 Advocacy on Healthcare Access Among Undocumented Immigrants - Successes and Challenges at Good Samaritan Clinic**
Author(s): Christopher Goodman, Jeff Hall, Shannon Madden, Lidia Navarette, Gina Gresham
- P11 Addressing Healthcare Disparities Associated with Opiate Use Disorder**
Author(s): Chris Goodman, Paul Bornemann, Morgan Adams, Bill Harris
- P12 Stress Management Education and Counseling: An Analysis of National Ambulatory Medical Care Survey Data 2015**
Author(s): Khin Win Myat
- P13 Understanding Barriers to Genetic Testing for Sickle Cell Trait: The African-American Male Perspective**
Author(s): Shandrea Foster and Debera Zvejnieks
- P14 Gestational Infections and BMI: Implications for Intellectual Disability Risk**
Author(s): Maggie S. J. McCarter

P01 Provision of Primary Care Nutrition Counseling Among South Carolina Children: Disparities by Weight Status and Sociodemographic Characteristics

Author(s): Jennifer Mandelbaum, Sayward Harrison, Jordan Brittingham
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University of South Carolina

BACKGROUND: Obesity affects 18.5% of U.S. children and is particularly prevalent in the Deep South. Pediatric primary care providers are advised to take an active role in obesity prevention and treatment by offering nutrition counseling to all children and families, yet few studies have examined these practices. This study aimed to describe patterns of nutrition counseling in South Carolina and identify potential disparities in the provision of nutrition counseling.

METHODS: Electronic medical records were retrieved for more than 99,000 wellness visits for children ages 2-18 in South Carolina from 2008-2016. Instances of nutrition counseling were examined using descriptive statistics. Recipients of nutrition counseling were then matched with non-recipients on gender and age (n=1,429 pairs), and conditional logistic regression was used to identify weight and sociodemographic disparities.

RESULTS: Nutrition counseling occurred at only 3.55% of wellness visits, with obese children more than three times as likely to receive counseling as healthy-weight children (odds ratio [OR]= 3.21; 95% confidence interval [CI]=2.62,3.93). African-American children were less than half as likely to receive counseling as white children (OR=0.41; 95% CI=0.32,0.51). Hispanic children were less likely to receive nutrition counseling compared to non-Hispanic children (OR=0.62, 95% CI=0.42,0.93). Children from rural areas were more than twice as likely to receive counseling as those from urban areas (OR=2.18; 95% CI=1.49,3.19). Uninsured children were less likely to receive counseling than children with commercial insurance (OR=0.51; 95% CI=0.29,0.91).

CONCLUSION: Nutrition counseling may be an underutilized tool in primary care for childhood obesity prevention, with findings suggesting many missed intervention opportunities. Higher obesity rates are one of the ways that health inequalities between minority and lower socioeconomic status children are manifested beginning in early childhood. Racial and geographic disparities in the provision of nutrition counseling may exacerbate the risk of childhood obesity among vulnerable child populations.

P02 Rural Substance Use Disorder Treatment Barriers and Facilitators in South Carolina

Author(s): Rebecca L. Christopher, Teri M. Browne, Aidyn L. Iachini, Dana D. DeHart, Melissa C. Reitmeier and Andrew J. Flaherty
University of South Carolina College of Social Work

BACKGROUND: Substance use is a behavioral health crisis in the rural United States and has been identified as one of the top ten priorities in Rural Healthy People 2020. Implementing evidence-based interventions in these underserved communities to address the needs of this population is associated with a unique set of challenges. To improve policy, practice and research in this area, this study explored client and agency stakeholder-perceived barriers and facilitators to substance use treatment delivery in rural communities.

METHODS: Group and individual interviews were conducted with 40 key stakeholders and 40 clients at 9 substance abuse agencies serving rural communities in South Carolina. Qualitative thematic analysis was used to identify perceived barriers and facilitators to client-centered substance abuse services in rural communities. Twenty-four qualitative interview transcripts, 6 sets of cross-site process notes, and 8 sets of program-specific researcher field notes were analyzed using MaxQDA software.

RESULTS: Forty clients of substance abuse treatment agencies participated in 8 focus groups. Forty stakeholders participated in 24 interviews (15 individual interviews and 9 group interviews). The qualitative data analysis resulted in the identification of 2 themes reflecting both barriers and facilitators of substance use services in these rural Southeastern communities: service availability, technology and 2 themes reflecting barriers of such services: cost and stigma.

CONCLUSIONS: This study identifies novel barriers and facilitators to substance use care related to policy, practice and research and highlights essential areas for consideration when developing and implementing integrated care programs in SC.

P03 Using an Arts-Based Intervention to Increase Colorectal Cancer Knowledge

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OBJECTIVE: To evaluate the effectiveness of an arts-based education program aiming to increase colorectal cancer (CRC) awareness, knowledge, and screening intention among an urban African-American (AA) community.

BACKGROUND: CRC is the third most commonly diagnosed cancer and the second leading cause of cancer death in the United States. AAs are 20% more likely to be diagnosed, and 200% more likely to die from CRC, compared with other demographic groups. Racial disparity for CRC may be partly attributable to disproportionate screening rates. Engaging communities in efforts to reduce cancer-related health disparities through mini-grant programs has shown to have meaningful impact.

METHOD: A predominantly AA church in South Carolina was awarded a community mini-grant to increase awareness about CRC screening among disproportionately high-risk AA communities through culturally appropriate arts-based cancer education. In collaboration with the South Carolina Cancer Prevention and Control Research Network and the American Cancer Society, the church created the theatrical production “Rise Up, Get Tested, and Live”. Key elements of the play included: age- and race-specific guidelines for CRC screening, screening modalities, risks, and benefits, the biological process for CRC development, and the testimony of two CRC survivors. A pre/post-test assessed the effectiveness of the production in increasing participants’ knowledge about CRC and examined their intentions to be screened.

RESULTS: Over 100 attendees viewed the play, with 96 attendees completing the pre-test, and all attendees completing the post-test. Results showed increased knowledge about CRC regarding prevention, screening recommendations, and screening methods ($p < .0001$). Over 86% of participants stated their intention to continue to be screened for CRC, and 82% intended to speak with others about CRC.

CONCLUSION: Findings suggest arts-based cancer education may be an effective tool for the dissemination of information about CRC screening. The play was found to be persuasive in increasing CRC knowledge among play attendees.

This study was funded by the South Carolina Cancer Prevention and Control Research Network under Cooperative Agreement Number U48/DP005000-01S2 from the Centers for Disease Control and Prevention (Prevention Research Centers) and the National Cancer Institute.

P04 Disparities in Prescription of Cholesterol Lowering Drugs Among the Uninsured in the US

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INTRODUCTION: Elevated blood cholesterol is a major risk factor for cardiovascular disease (CVD), a leading cause of morbidity and mortality in the US, and statin therapy has been strongly associated with a reduced risk of atherosclerotic CVD. Availability of health insurance is an important predictor for the prescription of drugs. This study aims to study whether insurance coverage and type of health insurance was associated with statin therapy. **Methods:** National Health and Nutrition Examination Survey (NHANES) Data was used to examine health insurance and statin prescriptions from 2009 to 2014. The study population included adults over the age 18. STATA (version 14.1) was used to run a logistic regression model to study the effects on health insurance on prescription of statins by physicians. **Results:** Of the 29,852 individuals in our sample, 32.5% were prescribed statins. Overall, 84.64% were covered by health insurance where 45.4% were covered by private insurance, 23.3% were covered by Medicaid, 12.72% were covered by Medicare, and 2.91% were covered by a government plan. People who were covered by health insurance were 1.31 times (OR 1.31: CI 1.13-1.50) more likely to be prescribed statins compared to people who did not have health insurance. People covered by private health insurance were 0.2 times (OR 0.80: CI 0.66-0.96) less likely; covered by Medicare are 4.34 times (OR 4.34: CI 3.97-4.75) more likely; and covered by other government health insurance plans are 1.23 times (OR 1.23: CI 1.05-1.42) more likely to be prescribed statins compared to people with no insurance. **Conclusions:** Individuals who had health insurance were more likely to be prescribed statins; emphasizing the importance of health insurance coverage to receive life-saving therapies. Individuals covered by private health insurance plans were less likely to be prescribed statins warranting further research into potential restrictions among private health insurance plans.

P05 Racial Differences in Diabetes Diagnosis Among Women with Chronic Stress: Findings from the South Carolina Women’s Survey

Author(s): Jennifer Mandelbaum, Spencer Moore, Monique Lyle, Alexander McLain, Jason Stewart, Susan Heiney

Department of Health Promotion, Education, and Behavior, Arnold School of Public Health, University of South Carolina

BACKGROUND: Racial and ethnic minorities are disproportionately burdened by type 2 diabetes, and disparities may be more prevalent in the southeastern U.S. Evidence suggests that stress may be associated with diabetes risk, yet few studies examine racial differences in this association. This study aimed to assess relationships among chronic stress, diabetes, and race in South Carolina women.

METHODS: Data came from the South Carolina Women’s Survey, an ongoing study of racially, socioeconomically, and geographically diverse South Carolina women that examines society-to-cell influences on aging. Analyses included a subsample of African-American and white women (n=290). Stress was measured using a 19-item scale (Cronbach’s alpha=0.84), with responses categorized into tertiles. Diabetes diagnosis was based on participant self-report. Data were analyzed using multiple logistic regression, adjusted for sociodemographic characteristics.

RESULTS: African-American women were significantly more likely to be in the top stress tertile compared to white women (41.6% compared to 31.4%; $p<0.01$). African-Americans were also more likely to have been diagnosed with diabetes than whites (30.0% compared to 19.4%; $p<0.05$). African-American women had similar risk of diabetes regardless of stress level ($p>0.05$), yet white women with low to moderate stress had a lower likelihood of diabetes diagnosis than African-American women at the same stress level ($p<0.05$).

CONCLUSION: Findings suggest that stress has a differential effect on diabetes diagnosis among African-American and white women. These differences may further exacerbate racial disparities in diabetes. Future research might examine factors that help to explain racial differences in the impact of chronic stress on women’s diabetes risk.

P06 Experiences of African American Men in South Carolina Between the Ages of 40 and 85 Living with Type 2 Diabetes

Author(s): Anthony Q. Walker DPT, Christine Blake, PhD, Ken Watkins PhD, Justin Moore, PhD
University of South Carolina

BACKGROUND: Type 2 diabetes (T2DM) is a chronic disease that poses many challenges to those living with it. African Americans are disproportionately affected by T2DM; additionally, African American men with T2DM are an understudied population. Understanding how African American men define and live with diabetes is important for developing effective, culturally sensitive strategies that are tailored to improve self-management behaviors.

OBJECTIVE: To explore the definitions of diabetes, experiences of living with diabetes, and diabetes self-management behaviors of African American men.

METHODS: In-depth qualitative interviews were conducted with 22 African American men between the ages of 40 and 85 diagnosed with T2DM. Interviews focused on participants' definition of diabetes, experiences living with diabetes, and self-management behaviors. In-depth interviews were transcribed and analyzed using Nvivo 10 with thematic analysis and an emergent and thematic coding technique.

RESULTS: When defining diabetes, many participants responded with the actual physical effects of diabetes and what causes diabetes, using words such as "sugar" or "glucose." Many participants described their experience living with diabetes negatively, with phrases such as "a lot of trouble," "a dangerous disease, and "a bad, nasty disease" and indicated that if they were compliant with their medication and maintained a proper diet, they could live a relatively normal life. Most of the participants indicated that they did not exercise or maintain a proper diet, but all of them indicated that they had been to their primary care physician within the last six months. Many participants reported an awareness of health complications that could be caused by diabetes such as amputations, diabetic comas, and even death. Participants' reactions when first diagnosed included disbelief, shock, and denial. Participants' emotional experiences of living with diabetes included apathy, shame and guilt, fatalism, fear, denial, and avoidance. Many participants expressed respect for and confidence in their healthcare providers, although a few expressed feelings of distrust and being uninformed. Many participants had self-management behaviors that included a routine of taking medications, relying on family support for encouragement, maintaining a proper diet, and dealing with the cost of diabetic medications and supplies.

CONCLUSION: Diabetes is a complicated disease that affects African American men disproportionately. Living with diabetes can be very challenging emotionally, physically, and mentally. Understanding the experiences of older African American men living with diabetes and how they define and describe diabetes is an important step in the ongoing process of developing and implementing strategies to help these individuals improve their quality of life.

P07 Effect of Health Insurance on HIV Testing: Evidence from the National Health and Nutrition Examination Survey (NHANES) 2009 - 2014

Author(s): Chamberline Ozigbu, MD, MPH; Bankole A. Olatosi, PhD, MS, MPH, FACHE; M, Mahmud Khan PhD

Department of Health Services Policy and Management, Arnold School of Public Health, University of South Carolina

BACKGROUND: Human Immunodeficiency Virus (HIV) testing is a critical component of the 90-90-90 goal for ending the HIV epidemic. Estimates show that about 1.1 million people are living with HIV in the United States with approximately 166,000 undiagnosed. Those who are undiagnosed contribute to 30% of all new infections. One paramount reason for low uptake of HIV testing is lack of access to health care. There is little data on HIV testing and insurance coverage in the United States from population-based surveys. We examined nationally representative data to determine if insurance coverage and type of health insurance increased HIV testing.

METHODS: Cross-sectional data from NHANES 2009-2014 was pooled for this study. Participants were restricted to adults aged 18-64 (N=16,297). Appropriate weights were applied to account for multistage sampling in NHANES. Multivariate logistic regression models were used to estimate the relevant parameters. All analyses were conducted using SAS (version 9.4) software.

RESULTS: Out of 16,297 respondents, only 5,762 (35.35%) tested for HIV. Significant HIV testing was observed among females (52%), Non-Hispanic White (62%), age between 35-44 years (25%), married (50%), and those with AA degree (34%). Overall, 79.2% were covered by health insurance, 58.8% covered by private insurance, 8.5% covered by Medicare, 9.5% covered by Medicaid, and 3.4% covered by military health care. After adjusting for other variables, we found that the odds of testing for HIV was higher in those with Medicaid than those without Medicaid [OR, 1.9 (95% CI: 1.40-2.62)], and those with military health care than those without military health care [OR, 2.8 (95% CI: 1.81-4.38)].

CONCLUSION: The goal of the national HIV/AIDS strategy is to increase number of people aware of their HIV status. Based on these findings, we advocate for Medicaid expansion to increase uptake of HIV testing and attain the 90-90-90 goal.

P08 Exploration of Motivation Among African American Men and Perceptions of Healthcare Providers Regarding Management of Type 2 Diabetes Using a Self-Determination Theory Framework

Author(s): Anthony Q. Walker DPT, Christine Blake PhD, Ken Watkins PhD, Justin Moore, PhD
Department of Health Promotion, Education & Behavior, Arnold School of Public Health, University of South Carolina

BACKGROUND: Diabetes disproportionately affects minority groups and can have deleterious effects on an individual's quality of life. It is important to understand the motivation for managing type 2 diabetes (T2DM) in older African American men to promote, improve, and implement appropriate and efficient management strategies. Managed appropriately, individuals with diabetes can reduce the risk of associated health complications and comorbidities and improve their health and quality of life. Gaining a perspective of how African American men and healthcare providers view motivation for managing T2DM is critical in improving and targeting effective diabetes management strategies.

OBJECTIVE: The purpose of this study was to explore motivation to self-manage T2DM in African American men between the ages of 40 and 85 using a self-determination theory framework and understand the factors that they and their healthcare providers believe influence motivation to manage diabetes and attend diabetes self-management education classes.

METHODS: In-depth interviews were conducted with 22 African American men between the ages of 40 and 85 with T2DM and 6 healthcare providers (2 male African American primary care physicians, 2 male European American primary care physicians, 1 female European American nurse practitioner, and one female African American Doctor of Pharmacy). Interview questions focused on participants' definitions of diabetes and motivation, how they manage their diabetes, and their motivation to manage diabetes and attend diabetes self-management classes. Healthcare practitioner interviews focused on their role in patient diabetes management and their opinion of what motivates patients to manage their diabetes.

RESULTS: Participants stated that they knew appropriate strategies to manage their diabetes, such as monitoring their diet, exercising, and checking glucose levels. However, most admitted that they did not consistently practice those strategies. Participants defined motivation in various ways, but overall their definition was consistent with having a "drive," a "goal," or "to achieve something without external pushing." Most participants described family or children as their primary motivation for managing their diabetes. None of the patients expressed true intrinsic motivation for managing their diabetes, such as doing it for joy. Two participants were amotivated, in that they did not really care about managing their diabetes, and most had extrinsic motivation, e.g., family or not wanting to have to deal with needles or finger pricks. Most healthcare providers viewed their role as a "cheerleader," "coach," "role model, or "lifestyle changer." Healthcare providers described using fear tactics to motivate participants to manage their diabetes, such as making them aware of possible erectile dysfunction or other health comorbidities. Healthcare providers believed that participants would be more motivated to attend diabetes management classes if they were more interesting, convenient, involved family, cost less/were free, empowered individuals, and recognized the importance of culture. Healthcare providers additionally believed that being able to spend more time with diabetic patients would be helpful.

CONCLUSION: For individuals with T2DM, managing diabetes is critical to improving quality of life and decreasing healthcare costs and medical visits. Understanding the motivation for managing diabetes in African American men, the types of motivation they exhibit, what healthcare providers believe motivates them to manage diabetes, and strategies they suggest may improve their attendance at diabetes self-management education programs can assist in improving diabetes self-management programs.

P09 Effective Recruitment Strategies for Enrolling African American Adults in Nutrition Intervention Research Studies

Author(s): Mary Wilson,¹ Gabrielle Turner-McGrievy,¹ Anthony Crimarco,¹ Sara Wilcox,¹ Edward Frongillo,¹ Angela Murphy²

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Purpose: To determine essential elements of effective recruitment strategies for enrolling African American (AA) adults interested in improving blood pressure, cholesterol levels, and weight in a two-year nutrition intervention research study. The Nutritious Eating With Soul (NEW Soul) Study will examine how plant-based and low-fat (standard) soul food diets may help improve heart disease risk factors and nutrition, in AA adults, and help with weight loss.

Methodology: Local media and community venues were identified as recruitment outlets. These outlets included radio stations (Glory Communications and Alpha Media) with a predominately AA listening audience and television stations with AA news anchors (NEWS 19). Community partners were identified including Palmetto Health Employee Health, SC FoodShare, the Carolina School for Inquiry, Richland County School District 1, Eat Smart Move More Richland County, SC Department of Health and Environmental Control, Holy Strokes, and AA churches. Recruitment tables were set up at health-related venues (Richland County Main Library Farmers Market and “Living Well Columbia” Health Fair). Lastly, we worked with our partner restaurants (Universal Love Vegan Café, Rawtopian Bliss, and Bert’s Southern Cooking) to post fliers and discuss recruitment options. Interested participants were directed to www.newsoul.org to complete a screening questionnaire. The questionnaire asked participants to identify where they learned about the study. Our recruitment goal was n=80 to invite to orientation.

Results: Between December 13, 2018-February 28, 2018, 272 persons completed the questionnaire to enroll; 211 qualified and 93 enrolled to attend orientation. The most successful recruitment strategies were the radio (29.2%), friend/family (28.8 %), and television (16.1%).

Conclusion: When conducting a nutrition intervention research study for AA, it is essential that recruitment personnel are embedded in the AA community across multiple sectors. Recruitment efforts should include engagement with diverse community stakeholders and should be distributed through multiple media outlets for maximum reach.

**P10 Advocacy on Healthcare Access Among Undocumented Immigrants -
Successes and Challenges at Good Samaritan Clinic**

Author(s): Christopher Goodman, Jeff Hall, Shannon Madden, Lidia Navarette, Gina Gresham
University of South Carolina School of Medicine

An estimated 275,000 Latinos called South Carolina home in the 2017 Census, 85,000 of which are likely undocumented. Access to care for this population is notoriously difficult due to systematic exclusion in our healthcare system. Recent changes to healthcare laws may have made matters worse by reducing payments to safety net hospitals to support charity care. Medicaid and CHIP have limited availability to immigrants in South Carolina. Federally Qualified Health Centers (FQHCs) like Eau Claire in Columbia, SC are good options, but have notable limitations in access for immigrants.

The Good Samaritan Clinic is a local free clinic system in Columbia, SC that provides healthcare predominantly to Latinos many of whom are undocumented. Three locations in the Columbia area provide primary care services on a weekly basis. The University of South Carolina has been a partner in this work for years in a variety of ways – largely through individual volunteerism. Currently several physicians with the USC School of Medicine regularly volunteer there each month. Faculty in social work and public health contribute time as well. USC students have been regular volunteers and created the volunteer organization Amigos del Buen Samaritano. On any given day it is common to see USC volunteers at one of the clinics.

The Good Samaritan Clinic volunteers and staff regularly bear witness to the injustice of immigration policies and health disparities related to inadequate access to care. However, limitations exist in speaking truth to power. The current political climate is toxic with regard to immigrants, and the clinic is especially dependent on funders that either may not act in the best interests of immigrants or not be receptive to advocacy. It is worth exploring these successes and barriers to ongoing action in addressing the healthcare disparities of Latinos in South Carolina.

P11 **Addressing Healthcare Disparities Associated with Opiate Use Disorder**

Author(s): Chris Goodman, Paul Bornemann, Morgan Adams, Bill Harris
University of South Carolina School of Medicine

The current opioid crisis is a national epidemic with more than 60,000 deaths last year alone. Substance use disorder (SUD) can both contribute to and be influenced by health disparities with access to care playing a major role. Part of the problem in access to treatment is the historical separation of behavioral health and primary care with very limited healthcare system resources in treating SUD. Furthermore, there is a national shortage of addiction specialists despite the worsening opiate epidemic. Primary care practitioners have a role to play, and with options like medication assisted treatment involving buprenorphine-based regimens, are able to take a more active role in managing opiate use disorder (OUD).

Unfortunately, primary care providers have been reticent to treat SUD (or OUD) for a variety of reasons. To combat this challenge, the University of South Carolina – Palmetto Health departments of family medicine and internal medicine have begun a conversation to change not only the way the largest healthcare provider in the state (Palmetto Health) approaches addiction treatment, but to also advance the training of future physicians to include the capacity to address substance use disorders. In partnership with LRADAC, our local substance use treatment center, the two clinical departments are exploring ways to expand access to treatment of opiate use disorder. This will include training for residents and faculty in medication assisted treatment (MAT) as well as offering primary care support for patients at LRADAC without access to a primary care physician. The mutually beneficial partnership could immediately expand access to MAT and more importantly enhance integration of primary care and behavioral health for the Midlands.

We expect to complete a service agreement in the coming months and to further coalition building to enhance both OUD treatment and primary care access.

P12 Stress Management Education and Counseling: An Analysis of National Ambulatory Medical Care Survey Data 2015

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Stress reflects our issues of emotion, relationship, health, identity, values, etc. Multiple and long-term stress can deteriorate our body's organs and systems, and lead to: impaired immune function, hypertension, stomach problems, cancer, sleep deprivation, mental illness, arthritis, lung diseases, etc. Stress management is imperative especially in today life-style. This study aims to identify the possible factors that are associated with 'stress management education and counselling' at ambulatory care practices. Using STATA, NAMCS 2015 data is analyzed. The subsample of adults (n=24273) is selected. A number of patient's and provider's variables - patient's age-group, race, insurance type, region, time spent with physician, ownership status of physician, type of healthcare office setting, specialty type, metropolitan statistical area, using electronic medical record - are used to explain the likelihood of stress management education and counseling. Bivariate analysis indicates the factors that are significantly associated with stress management education: (1) age-groups 35-44, 25-34, 18-24, (2) race - Black, non-Hispanic other, Hispanic, (3) people with Medicaid and private insurance types, (4) non-private or solo (other) type of office setting, (5) primary care and medical care specialties, (6) employee physicians, (7) West region, (8) non-MSA (non-metropolitan statistical area), and (9) offices that partly and fully have EMR (Electronic Medical Record). Logistic regression analysis signifies that physician offices at West (OR=1.8, CI: 1.02-3.22) and at non-MSA (OR=3.05, CI: 1.60-5.81) have higher odds of providing 'stress management education and counseling' than those at other regions and those at MSA. African-Americans are more likely (OR=2.7, CI: 1.62-4.58) to receive stress management counseling than other races. Region-wise stress management education and counseling should be re-evaluated. Further qualitative studies should be focused on exploring social determinants of receiving 'stress management education and counseling' for detrimental stress: (1) racial and ethnic disparity, and (2) disparity between MSA and non-MSA residents.

P13 Understanding Barriers to Genetic Testing for Sickle Cell Trait: The African-American Male Perspective

Author(s): Shandrea Foster and Debera Zvejnieks
Genetic Counseling

This research project studied educational, psychosocial, and physical barriers associated with genetic testing for sickle cell trait in African-American men. Genetic counselors commonly see individuals with sickle cell trait and counsel them on the recurrence risk for sickle cell disease. Research and anecdotal experience has shown that African-American men are reluctant, or less likely, to test based on insights gathered from research involving African-American female counterparts. Given this information, this study hypothesized that a lack of education and awareness of sickle cell disease and sickle cell trait are the biggest contributing factors to the reluctance from males to not have genetic testing to confirm their trait status. To answer the research question, 116 African-American men, ages 18 to 50+, were asked to take a survey featuring questions on knowledge, risk perception, barriers, and motivating factors in genetic testing for sickle cell trait. Preliminary results showed a discordance between perceived carrier frequency and perceived personal risk for sickle cell trait, highlighting a lack of awareness within the context of the condition. The most significant barrier to testing identified in the study was lack of information about sickle cell trait or testing options from primary care physicians, while the largest motivating factor for testing was personal health reasons. Genetic counselors have a skillset capable of addressing the educational and psychosocial aspects involved with a genetic condition, such as sickle cell disease. Having a better understanding of these issues will be useful for genetic counselors when counseling at-risk couples and open a dialogue that hopefully improves the uptake of African-American men undergoing genetic testing for sickle cell trait, allowing for an accurate recurrence risk for couples during pregnancy.

P14 Gestational Infections and BMI: Implications for Intellectual Disability Risk

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ABSTRACT: Many parents seek answers to the etiology of intellectual disability (ID) in their child, but only a fraction of the cases has known causes, 50-60% being attributed to genetic or chromosomal factors, which are rarely preventable. However, there are modifiable risk factors for ID. Obesity and infection for example, are known causes of adverse birth outcomes such as preterm birth and congenital infection that could cause ID, but little is known on the interaction of these two factors. In a retrospective cohort study, we sought to: 1) explore the relationship between gestational infection, maternal obesity, and ID in children, 2) to further explore the relationship of various kinds of gestational infection (general infection (GI), sexually transmitted infection (STI), and GI & STI co-infection) to ID in children. The study sample (n= 210,176) was derived from multiple linked datasets including SC Medicaid records, SC Department of Education records, and the SC Department of Disabilities and Special Needs database. These datasets included demographic, medical, and behavioral information of both mother and child. After exclusion criteria were applied, 124,047 mother and child pairs were included in this study. Infection and BMI were both categorized and after adjusting for multiple confounders, there was evidence that BMI modified the relationship between infection and ID. Underweight and obese mothers who had a general and sexually transmitted co-infection during pregnancy saw the greatest increase in odds of having a child with an intellectual disability, when compared to mothers within the same weight category with no infection (OR 2.76 & 1.47, respectively). Additionally, underweight mothers with GI & STI co-infection had substantially higher odds of having a child with ID compared to either STI only and general infection only categories (ORs 2.41; 95% CI 1.44 - 4.03 & 3.76; 95% CI 1.54 - 9.17, respectively). There were no differences between STI and GI categories when compared to each other. These findings contribute to understanding the complexities of the relationships between infection, maternal BMI, and intellectual disability.

Abstracts accepted but not presented

Using A Population-based Study to Address Health Disparities in Access to Specialist for Women

Author(s): Serdar Aydin, Neset Hikmet

Altering Healthcare Providers: Does Gender Play a Role?

Author(s): Serdar Aydin, Shyamkumar Sriram

Addressing End-of-Life Care in Physician's Practices in South Carolina: An Exploration of Racial Differences in Outcomes

Author(s): Maggi Miller, MS, PhD, Gelareh Rahimi MS, PhD(c)

Using A Population-based Study to Address Health Disparities in Access to Specialist for Women

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Access to timely and appropriate healthcare services from a specialist is crucial. Access to medical care for women in the United States has significantly improved. However, previous studies have reported that women use fewer health care services offered by a specialist than man despite having worse health status. This study is going to begin filling in some of these gaps in knowledge. The objective of this study is to determine whether there is a correlation between women and access to a specialist compared to man. 2015 National Health Interview Survey was used in this study (n= 36,345). Pearson's correlation between gender and accessing specialist were computed to explore the relationship between variables. Logistic regression was conducted to study the association of women and male with access to a specialist.

While 3.8% male couldn't see a specialist, women had 5.2% of total not to see a specialist. Racial differences are significantly associated with access to healthcare from a specialist ($\chi^2 = 40.767$, $p = .000$). The result also provides that there is a significant difference between male and female in terms of accessing a specialist (OR= 1.39; 95% CI 1.25-1.53).

In the large and most recent nationally representative sample, consistent with prior literature we found women disparities to access to a specialist, male were 40% more likely to have seen a specialist than women. Future research is needed to identify barriers in accessing a specialist.

Altering Healthcare Providers: Does Gender Play a Role?

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A focus on changing places in healthcare can provide some important contributions to evaluate health and health inequalities as well as quality of care. Many healthcare organizations have fallen from public trust. Women switching healthcare organization behavior can show a remarkable signal to understand some disparities against them. This study is going to begin filling in some of these gaps in knowledge that has remained virtually unexplored in the women disparities literature. In this study, we focus on the role of gender when an individual decides to change healthcare provider.

METHODS: The 2015 National Health Interview Survey (NHIS) asked adults regarding their experiences whether healthcare place has been changed during the past 12 months, “Change healthcare place, past 12 m” (n =31,386). We used both logistic regression model to compare the relationship of women and male with changing healthcare place, and chi-square tests was also used to explore the association between covariates.

RESULTS: 7.4% of male changed healthcare place compared to 9.5% female. Changing healthcare place is associated with gender ($\chi^2 = 45.544$, $p = .000$). The regression result also shows that there is a significant relationship between male and changing healthcare place (OR= 1.32; 95% CI 1.22-1.43) compared to women.

CONCLUSION: In this study, we identified the relationship between gender and changing healthcare provider. The result is encouraging further research needed to determine the factors that may be associated with changing healthcare place among gender differences.

Addressing End-of-Life Care in Physician's Practices in South Carolina: An Exploration of Racial Differences in Outcomes

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The goal of Advanced Care Planning (ACP) is to identify, capture, and honor the choices that individuals make with respect to end-of-life care. Gaining interest and conducting culturally relevant discussions about ACP have been found to be a challenge, particularly in African American (AA) populations. In this pilot project, physicians and staff at 4 family medical practices were trained by a certified Respecting Choices® Advance Care Planning (ACP) Trainer to be able to engage in person-centered and family-oriented, face-to-face discussions about ACP, the process, and its importance with patients ages 35 and older. Pre- and post-test measures were used to capture knowledge gained from the patients' discussions. A total of forty-six individuals participated in the project. Sixty-five percent were female and 35% were AA. The majority reported having a high school education or less (AA=69%, W=80%). White participants were on average 3 years older than their AA counterparts (mean=67, range 37-87). Ninety-six percent of all patients were enrolled in Medicare, while 31% of AA's and 24% of whites were enrolled in Medicaid. Thirteen patients completed pre- and post-test measures. While patient's level of ACP knowledge increased in all 5 aspects, AA's showed higher improvements. In AA's, the ability to develop an advance care plan was increased by 11% vs 2% in whites and knowing a physician/staff member can provide information and guidance about ACP increased 11% vs 7% in whites. AA's also showed a 16% higher level of improvement in their understanding of the need to discuss wishes for future care with physician, family, and/or faith community. These results suggest that person-centered, family-oriented educational discussions within family medical practices can be beneficial in overcoming cultural barriers in understanding and developing an ACP. Culturally appropriate models of ACP training are needed to serve and empower AA patients.



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