

UAB MINORITY HEALTH & HEALTH EQUITY
RESEARCH CENTER

The University of Alabama at Birmingham

Health Equity Research Symposium
April 20, 2023

TURNING THE
VISION OF
HEALTH
EQUITY
INTO A
REALITY

MHERC



A LETTER FROM THE DIRECTOR



Dear Symposium Guests,

With great pleasure I welcome you to the UAB Health Equity Research Symposium.

The symposium highlights research in health disparities and health equity by academic investigators, students, and community partners in basic science, clinical research, social and behavioral science, community-based, and health outcomes research.

Organized by the UAB Minority Health & Health Equity Research Center (MHERC), a University-Wide Interdisciplinary Research Center and a designated Center of Excellence by the National Institutes of Health, this scientific meeting has expanded in ways that reflect the growth and proliferation of the Center. The symposium began in 2005 as a Minority Health Research Day with presentations by UAB faculty. Over the years, its themes covered a range of health disparities topics, such as obesity, diabetes, cancer, genomics, and health policy. The forum eventually expanded to reflect the entire science of health disparities “from discovery to delivery,” and became distinctly integrative in its approach, highlighting the convergence of biological, clinical, social, and behavioral disciplines in health disparities research. As the symposium’s scientific concept matured, the event began to draw experts from around the nation and the globe, and became a crucial forum for engaged and informed participants around the country to discuss the most recent research. This year’s symposium is co-sponsored by the UAB Obesity Health Disparities Research Center, working to reduce obesity and related health disparities in the state.

I extend a warm welcome to our speaker, Wayne Giles, M.D., M.S., who will share valuable insights about Turning the Vision of Health Equity into Reality. Dr. Giles is the dean of the school of public health at the University of Illinois Chicago, centered in the largest urban medical district in the U.S. He joined UIC after serving for 25 years as a leader at the Center for Disease Control and Prevention, focused on chronic disease prevention and health promotion.

The symposium’s success over the years would not have been possible without you, your interest in the causes and impact of health disparities, your passion for excellence and innovation, and your enthusiasm for equity in health and health care. Thank you for your time, commitment, and continued support!

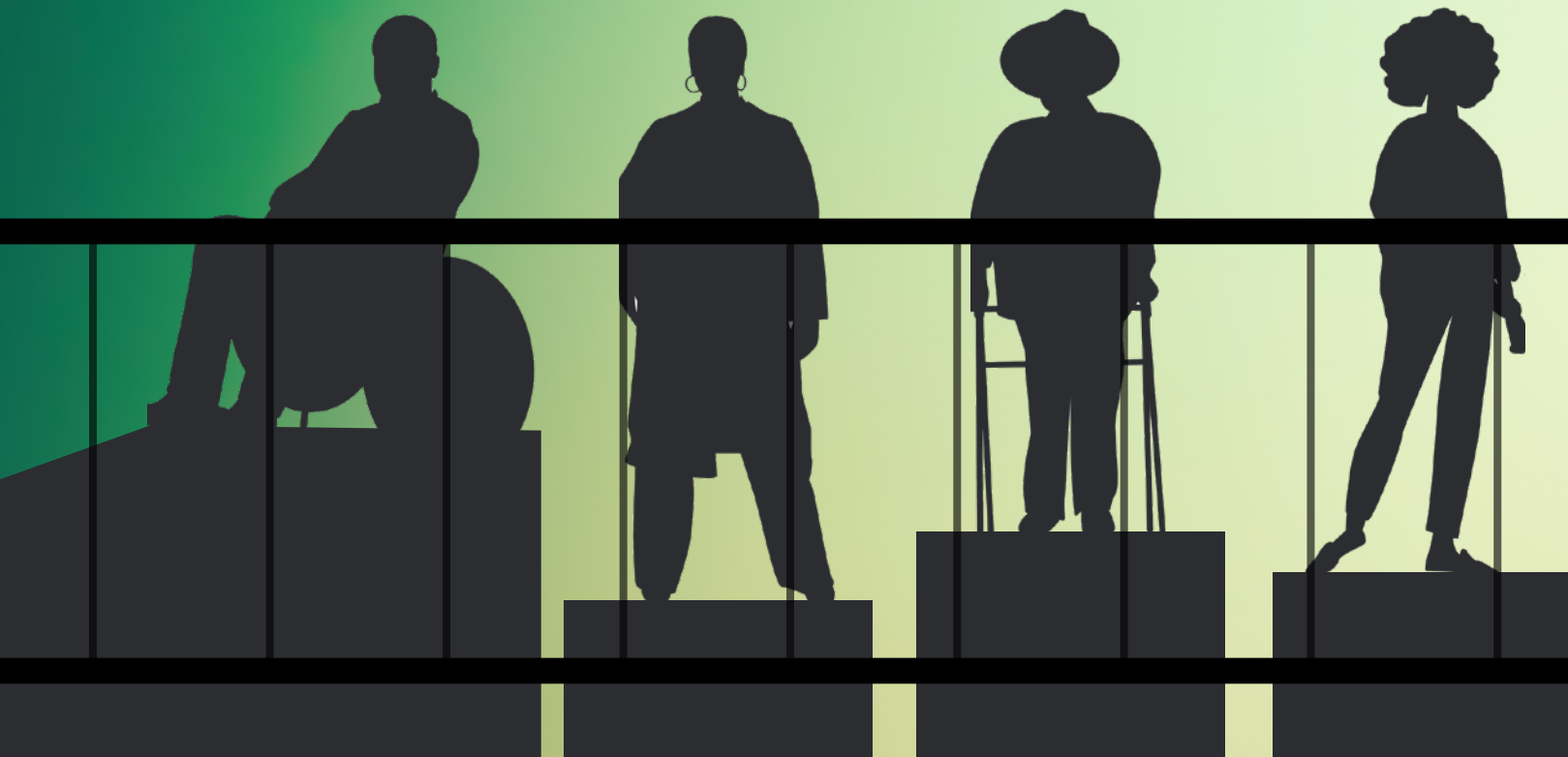
I hope that you will use this scientific forum to enrich your views, share ideas and perspectives with colleagues, create networks, and generate collaborations that will bear future projects.

With best wishes for a productive and enjoyable meeting,

A handwritten signature in black ink that reads "Mona Fouad".

Mona Fouad, M.D., MPH

Associate Vice President for Diversity, Equity and Inclusion, UAB
Senior Associate Dean for Diversity and Inclusion, Heersink School of Medicine
Professor, Division of Preventive Medicine
Edward E. Partridge Endowed Chair for Cancer Disparity Research
Director, UAB Minority Health & Equity Research Center
PI, UAB Obesity Health Disparities Research Center



FROM MHRC TO MHERC: 20 YEARS IN 2022

There have long been significant differences in health across race, income, education and geographic location. In Alabama and across the Deep South, the impact of these differences is seen everywhere, from the state's largest cities to its most rural areas.

For 20 years, the University of Alabama at Birmingham Minority Health & Health Disparities Research Center has taken a comprehensive, science-first approach to improve the health of people in historically under-resourced areas — with efforts in research, training and community engagement.

The inspiration came on a bus ride through the Mississippi Delta.

"We passed by these tiny houses, and in front of one were maybe eight or nine children," said Mona Fouad, M.D., director of the Minority Health & Health Equity Research Center. "I thought, if we tell a woman living there to get a mammogram, how is she even going to get there? What other health issues does she face? What about her children? We can't just tell her to get a mammogram and ignore everything else."

After returning from that trip, Fouad, Ed Partridge, M.D., former director, and Selwyn Vickers, M.D., former Marnix E. Heersink School of Medicine dean, recognized that, while genetics, biology and personal choices play a significant role in health and illness, so does a person's everyday circumstance. Addressing these disparities in a meaningful way would require a holistic approach.

And in 2002, the Minority Health & Health Disparities Research Center was born.

Through National Institutes of Health- and Centers for Disease Control-funded projects, the MHRC has been at the forefront of health disparities research, generating more than \$165 million to address such inequities. Additionally, since its inception, the center has provided nearly \$7 million in funding to 146 health disparity scientists.

To build the pathway of future researchers, the MHRC's training programs have welcomed generations of new scientists to the field. Leveraging strong, enduring partnerships with other institutions — including several historically Black colleges and universities — the MHRC has been able to reach more than 1,000 scholars at the undergraduate, graduate, postdoctoral and faculty levels.

As is the trust built within academia, the MHRC's relationships with partner communities and organizations are critical to the center's success. Since the beginning, a guiding principle of the MHRC has been that research should be grounded in trusting, respectful and mutually beneficial relationships that last beyond one project. Facilitating those partnerships is the center's team of community engagement professionals who nurture relationships with nearly 200 partners and 100 advisory board members.

While the work conducted by the Minority Health & Health Disparities Research Center has been remarkable, it is not done.

"We've made great strides in understanding the underlying causes of health disparities," Fouad said. "But, looking to the future, we need to move beyond documenting and understanding disparities. We need to achieve health equity for all populations."

With a vision of the future, the MHRC has changed its name to the UAB Minority Health & Health Equity Research Center.

Health is a complex mix of genetics, biology, personal choices, environment and lived experience. As the Minority Health & Health Equity Research Center embarks on its next phase, it calls on all community members to work together to make health equity a reality.

ABOUT THE SPEAKER



Wayne H. Giles, MD, MS, became the Dean of the School of Public Health at the University of Illinois Chicago (UIC) in September 2017. UIC is the only fully accredited school of public health in the state of Illinois. It has four divisions and offers seven degrees.

Prior to joining UIC, Dr. Giles spent 25 years at the Centers for Disease Control and Prevention (CDC) where he led the Division for Heart Disease and Stroke Prevention, the Division of Population Health and the Division of Adult and Community Health, all within the National Center for Chronic Disease Prevention and Health Promotion. His portfolio at the CDC included running one of the organization's most diverse divisions with programmatic and research activities in community health promotion, arthritis, aging, health care utilization, school health and racial and ethnic disparities in health.

His past work experience has included studies examining the prevalence of hypertension in Africa, clinical trials evaluating the effectiveness of cholesterol-lowering agents, and studies examining racial differences in the incidence of stroke. He has over 150 publications in peer-reviewed journals and has authored several book chapters. He has been the recipient of numerous awards including the Centers for Disease Control and Prevention's Charles C. Shepard Award in Assessment and Epidemiology and the Jeffrey P. Koplan Award.

Dr. Giles holds a BA in Biology from Washington University, a MS in Epidemiology from the University of Maryland, and a MD from Washington University, and has completed residencies in both Internal Medicine (University of Alabama at Birmingham) and Preventive Medicine (University of Maryland).

Professional Leadership

- Board Member, Association of Schools and Programs of Public Health
- Advisory Board Member, Dept of Population Science & Policy, Southern Illinois University School of Medicine
- Member, Chicago Institute of Medicine



AGENDA: MORNING

TIME	TOPIC	ROOM
8:00 AM - 10:00 AM	Registration and Breakfast Buffet	Lobby
POSTER SESSION		
8:30 AM - 10:00 AM	Poster Session: Review Research Posters and Discuss with Presenters	Hamilton II
BREAKOUT SESSIONS		
10:15 AM - 11:45 AM	Moderator: Upender Manne, PhD, MSc Professor, UAB Heersink School of Medicine, Departments of Pathology and Surgery, UAB School of Public Health, Department of Epidemiology	Skipwith I
1	Baker, Elizabeth H., PhD Associate Professor, UAB Department of Sociology	Food insecurity screening, local food access, and state food assistance policies: contributions to nutritional outcomes across CF programs in the United States
2	Fowler, Mackenzie E., PhD Postdoctoral Scholar Trainee, UAB Heersink School of Medicine, Division of Hematology and Oncology	Association between food insecurity and frailty among older adults with gastrointestinal malignancies - The CARE Registry
3	Noha Sharafeldin, MD, MSc, PhD Assistant Professor, UAB Heersink School of Medicine, Division of Hematology and Oncology	Impact of neighborhood disadvantage on cognitive complaints in solid cancer survivors
4	Smith, Burkely, MD General Surgery Resident, UAB Heersink School of Medicine, Department of Surgery	The impact of social vulnerability on adherence to a colorectal enhanced recovery program
10:15 AM - 11:45 AM	Moderator: Maria Pisu, PhD Professor, UAB Heersink School of Medicine, Division of Preventive Medicine	Skipwith II
1	Bateman, Lori B., PhD Assistant Professor, UAB Heersink School of Medicine, Division of Preventive Medicine	Addressing COVID-19 vaccine hesitancy and uptake in trustworthy contexts: developing and implementing a church based intervention
2	Hopkins, Jammie, DrPH Assistant Professor, Morehouse School of Medicine, Community Health & Preventive Medicine	Employing a collaborative, participatory approach to survey COVID-19 knowledge, attitudes, behavior and life experiences among racial/ethnic minorities and other socially vulnerable populations.
3	McDonough, Ian M., PhD Associate Professor, University of Alabama, Department of Psychology	Resilience resources may buffer some middle-aged and older Black Americans from memory decline despite experiencing discrimination
4	Oates, Gabriela, PhD Associate Professor, UAB Heersink School of Medicine, Department of Pediatrics	Reducing Ethical and Social Prejudicial Effects of COVID-19 Testing in Underserved Populations (RESPECT-UP)
LUNCH		
11:45 AM	Lunch Buffet Opens	Lobby

AGENDA: AFTERNOON

TIME	TOPIC	ROOM
WELCOMING REMARKS		
12:15 PM	Mona Fouad, MD, MPH Associate Vice President for Diversity, Equity and Inclusion, UAB Senior Associate Dean for Diversity and Inclusion, Heersink School of Medicine Professor, Division of Preventive Medicine Edward E. Partridge Endowed Chair for Cancer Disparity Research Director, UAB Minority Health & Equity Research Center	Hamilton I
KEYNOTE ADDRESS		
12:30 PM - 1:30 PM	Wayne Giles, MD, MS, Dean of the School of Public Health University of Illinois Chicago Turning the Vision of Health Equity Into a Reality	Hamilton I
EXCELLENCE IN MENTORING AWARDS		
1:30 PM - 1:50 PM	UAB Minority Health & Health Equity Excellence in Mentoring Awards	Hamilton I
MHERC TRAINING ALUMNI PHOTO		
2:00 PM	UAB MHERC Training Programs Alumni Photos	Lobby





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Excessive Alcohol Drinking in Association with the Social Determinants of Health among Adults in the United States, 2017.

Aboagye, Anita, MSW- Student; Wilkinson, Larrell, PhD, MSPH- Associate Professor; Appah, Mary, MS- Student; Carr, Amy, MS, CHES- Student; Humphries, Alliemarie, MPA- Student; Long-Daniels, Alexis, MA- Student; Washington Janice, Student; Enyinda, Victoria, MPH- Student; Talbott-Forbes, Laura, PhD, MSHA- Professor

INTRODUCTION: Excessive alcohol use causes approximately 140,000 deaths each year in the United States (U.S.). Binge and heavy drinking is associated with a broader range of social factors including differences in demographic factors such as gender, age, ethnicity and socio-economic status. The social determinants of health (SDoH) are conditions that contribute to health outcomes, and quality of life; however, it is unclear to what extent SoDH impact excessive alcohol use. The current study therefore examines the association between excessive drinking and social determinants of health.

METHODS: Using data from 81,579 adults in 17 US states who participated in the 2017 Behavioral Risk Factor Surveillance System (BRFSS); the independent association between excessive alcohol use and the SDoH variables were examined. Excessive alcohol use was studied through examining binge drinking and heavy drinking among survey participants who completed the SDoH optional module within participating BRFSS states and entities. Differences in proportions were assessed for excessive alcohol measure status and SDoH variables based on clinical significance given a two-tailed alpha of 0.05.

RESULTS: The prevalence of binge drinking among participating states was 17.47% and 6.34% for heavy drinking for U.S. adults. Among excessive drinkers, 79% had current health insurance and 78% had a recent medical check-up. Significant differences in respondents by age, gender, race/ethnicity, marital status, employment status, household income, housing insecurity, stress level, general health, medical check-up, and health insurance were observed for binge and heavy drinking ($p < 0.05$). Three SDOH factors were associated with binge drinking and two SDOH factors were associated with heavy alcohol use ($p < 0.05$).

CONCLUSIONS/DISCUSSION: As excessive drinking is associated with a broader range of individual factors including differences in demographic factors such as gender, age, ethnicity, and socio-economic status; contextual factors also contribute to health-related behaviors, like excessive alcohol use. As reporting being male and race/ethnicity (i.e., European American and Latino/Hispanic) were significantly associated binge and heavy drinking (i.e., European American), interventions should build on the U.S. Preventive Services Task Force to broaden efforts to screen all adults for excessive alcohol use, while focusing on stress levels and housing instability to reduce heavy alcohol use.

ACKNOWLEDGEMENTS: Thank you to my academic advisor, Dr. Larrell Wilkinson, for providing guidance and feedback throughout this project. Thanks also to my colleagues, for their enormous contributions to this research project.



NOTES

Town and Gown Symposium: A Virtual Townhall Meeting to Address Health Disparities in Alabama

Adedoyin, Christson A., PhD; Adunlin, Georges, PhD, MA, MEd

OVERVIEW: Community-University partnership is a strategic way to address health disparities for under resourced communities especially in the deep south of the USA. This presentation outlines detailed steps and initiatives that were used in Birmingham, Alabama to mitigate health inequity through the deployment of community-based participatory research (CBPR). Community-based participatory research embodies concepts essential to academic and community-based organizations (CBOs) partnership to address health inequity. This presentation outlines an interprofessional education (IPE) and faculty-driven initiative at the Samford University College of Health Sciences (Birmingham, AL) to virtually establish research partnership with the local CBOs to address health equity.

PURPOSE: This presentation describes the processes and collaboration that ensued between faculty at an academic institution and local CBOs to virtually discuss and address health equity and improve racial harmony through CBPR. **DESIGN METHODS:** The CBPR approach was utilized to develop an interdisciplinary group of scholars organized within a 'Health Outcomes Research Consortium.' The consortium established key priority research areas that expand access to care and enhance the quality of health and outcome. The consortium organized a virtual symposium on health disparities. The virtual symposium brought together members of the research consortium and the community to foster interest, skills, and partnerships and undertake community-based participatory research.

RESULTS: The health disparities virtual symposium occurred on March 7, 2022, and attracted 106 attendees, including researchers, healthcare professionals, students, community members, and leaders. The symposium achieved the following: (1) examine the existing racial, ethnic, and socioeconomic health disparities; (2) discuss public health practice to achieve health equity through integrated community-academic partnerships and collaborations; (3) review systems to improve community voice and action to affect social and structural conditions that are known to have wide-ranging health effects on communities.

CONCLUSION: The initial framework of the virtual symposium was to learn from the community and identify opportunities and barriers to conducting CBPR. Our experiences demonstrate that a well-designed process and appropriate collaborative models are needed to identify and engage community partners.

NOTES

Akil, Luma, PhD, MS, CPH

Jackson State University College of Health Sciences,
Behavioral and Environmental Health

Poster 3

Socioeconomic impacts of COVID-19 pandemic on foodborne illnesses in the United States

Akil, Luma, PhD, MS, CPH; Ahmad, Hafiz Anwar, PhD, MBA, MS

INTRODUCTION: Foodborne diseases continue to impact human health and the economy. The COVID-19 pandemic has dramatically affected the food system from production to consumption. This project aims to determine the impact of the COVID-19 pandemic on the spread of foodborne diseases and the factors that may have contributed, including environmental, behavioral, political, and socioeconomic.

METHODOLOGY: Data for this study were collected from The Foodborne Diseases Active Surveillance Network (FoodNet) for 2015-2020. FoodNet personnel located at state health departments regularly contact the clinical laboratories in Connecticut (CT), Georgia (GA), Maryland (MD), Minnesota (MN), New Mexico (NM), Oregon (OR), Tennessee (TN), and selected counties in California (CA), Colorado (CO), and New York (NY). Data were analyzed using SAS to determine the changes in rates of foodborne pathogens reported in FoodNet before and during the COVID-19 pandemic in the ten reporting states.

RESULTS: Results of the study showed a significant decline in the incidences of foodborne diseases ranging between 25% and 60%. A geographical variation was also observed between California and states with the highest decline rate of foodborne illnesses.

CONCLUSIONS: Policies and restrictions, in addition to environmental and behavioral changes during the COVID-19 pandemic, may have reduced rates of foodborne diseases.

ACKNOWLEDGMENTS: This research was supported by the National Institutes of Health/National Institute on Minority Health and Health Disparities Grant # 1U54MD015929-01, through the RCMI Center for Health Disparities Research at Jackson State University.

NOTES

Alshehri, Najlaa A., MS

UAB School of Education, Human Studies

Poster 4

The association of hypertension and medication taking with difficulty concentrating and remembering among adults living in the Deep South of the United States.

N. A. Alshehri; L. L. Wilkinson

INTRODUCTION: High blood pressure (HBP) is a major risk factor for cardiometabolic diseases (Tam et al., 2020). Alabama, Georgia, and Mississippi (Deep South States) are states with higher hypertension prevalence (Centers for Disease Control and Prevention, 2022). One of the major causes of treatment failure is inadequate adherence to prescribed medications, especially in chronic diseases such as hypertension (Ramli et al., 2012). Moreover, HBP has been associated with a decline in cognitive function (Felicia et al., 2013). Therefore, health education providers focus on medication adherence and lifestyle modifications to reduce chronic disease risks and improve quality of life (QoL). This study examines the association between cognitive skills and hypertension medication adherence among Deep South adults.

METHODS: Data from the 2019 Behavioral Risk Factor Surveillance System (BFRSS) was analyzed for 19,532 individuals ages eighteen or older from the Deep South States. Rao-Scott Chi Square proportional testing was performed to determine differences between observed and expected frequencies given proportions of self-reported HTN and currently taking medicine for HBP. The study also explores differences by sociodemographic variables.

RESULTS: 9,537 individuals from the 3 Deep South States, an estimated 39% of the weighted population. A weighted estimate of 80% of reported currently taking medication for HTN. A significantly greater proportion of individuals with HTN reported difficulty concentrating, remembering, or making decisions compared to non-hypertensives ($p < 0.0001$). Among persons with HTN only, no differences were observed in reporting difficulty concentrating, remembering, or making decisions by age ($p=0.142$). However, significant differences were observed by race/ethnicity ($p=0.003$), education ($p < 0.0001$), and household income ($p < 0.0001$). Among persons with HTN, a significantly greater proportion of individuals not taking medications reported difficulty concentrating, remembering, or making decisions compared to persons taking medication ($p=0.005$).

CONCLUSION: Healthy People 2030 objective HDS-05 targets increasing the proportion of adults with hypertension whose blood pressure is under control. In support of this objective, health education and promotion efforts should consider targeting improvement in QoL when encouraging individuals to adhere to medication. By employing behavior change strategies, health educators may increase one's motivation to engage in health interventions, including medication adherence, to improve hypertension health outcomes and reduce disparities.

NOTES

Ocular disease frequency and patient perspectives in an ophthalmic telemedicine program

Antwi-Adjei Ellen K., OD, MPH; Swain Thomas, MPH; Racette Lyne, PhD; Rhodes Lindsay A., MD, MSPH

INTRODUCTION: Individuals from underserved populations experience more barriers to eye care access, placing them at higher risk for visual impairment and blindness. Telemedicine has the potential to improve the early detection and management of eye diseases in underserved populations. The aim of this study was to ascertain the frequency of ocular diseases identified through an ophthalmic telemedicine program and to assess patient perspectives of using such a program.

METHODS: Patients at risk for an ocular disease based on age, race, or family history, were enrolled at three federally qualified health centers (FQHC) in rural Alabama. All participants had visual acuity, intraocular pressure, and visual field testing followed by fundus imaging. Results were electronically sent to an ophthalmologist at the University of Alabama at Birmingham for diagnosis. Patient perspectives were assessed by a satisfaction survey.

RESULTS: Of the 500 participants included in the study (mean age of 58.1 ± 13.5 years), 64.4% were female and 45.6% were black. Among the participants with medical insurance (83.4%), 43.4% had private coverage, 32% were on Medicare, and 20.2% on Medicaid. The telemedicine evaluation identified 5.6% of patients as having glaucoma and 11.6% as glaucoma suspects. A substantial percentage of patients presented with cataracts (35%), refractive errors (65.8%), diabetic retinopathy (5.4%), and other ocular diseases (11.6%). The screening referred 47.2% of the patients for follow-up examination. Patients reported being very satisfied with the vision screening (85.8%) and with the time needed to perform the screening (83.2%), while 92.2% reported that it was very convenient to receive a vision screening in the location where they see their primary care doctor. Most patients (95.2%) reported being very likely to attend a follow-up appointment if a referral was made.

CONCLUSIONS: The high percentage of patients diagnosed with potentially blinding diseases in this study underscores the need for detection programs within underserved communities, as well as the importance of following up with specialty care. Our results show that patients welcome screenings provided within their community. These preliminary findings suggest that telemedicine screenings in FQHCs can be effective and may be scalable nationwide.

ACKNOWLEDGEMENTS: This research was supported by the Centers for Disease Control and Prevention (1U01DP006441) with supplemental support from the EyeSight Foundation of Alabama, Birmingham, AL, and Research to Prevent Blindness, New York, NY.

NOTES

Associations between health insurance status, neighborhood deprivation, and treatment delays in women with breast cancer living in the Deep South

Awan, Sofia, MPH; Saini, Geetanjali, PhD; Lunningham, Justin, PhD; Gogineni, Keerthi, MD MSHP; Collin, Lindsay, PhD, MPH; Bhattarai, Shristi, PhD; Aneja, Ritu, PhD; Williams, Courtney, DrPH

INTRODUCTION: Little is known regarding the association between insurance status and treatment delays in women with breast cancer, and whether this associations varies by neighborhood socioeconomic deprivation status.

METHODS: In this retrospective cohort study, we used medical record data of women diagnosed with breast cancer between 2004 and 2021 at two Georgia-based healthcare systems. Treatment delay was defined as >90 days to surgery or >120 days to systemic treatment. Insurance coverage was categorized as private, Medicaid, Medicare, other public, or uninsured. Area deprivation index (ADI) was used as a proxy for socioeconomic status. Associations between delayed treatment and insurance status were analyzed using logistic regression, with an interaction term assessing effect modification by ADI.

RESULTS: Of 14,419 women with breast cancer, 54% were non-Hispanic Black and 52% were privately insured. Compared with privately insured patients, those who were uninsured, Medicaid enrollees, and Medicare enrollees had 86%, 71%, and 26% higher odds of delayed treatment, respectively (odds ratio [OR]: 1.86, 95% confidence interval [CI]: 1.38-2.51; OR: 1.71, 95% CI: 1.40-2.09; OR: 1.26, 95% CI: 1.06-1.51). Among patients living in low-deprivation areas, those who were uninsured, Medicaid enrollees, and Medicare enrollees had 104%, 84%, and 25% higher odds of delayed treatment than privately insured patients (OR: 2.04, 95% CI: 1.47-2.82; OR: 1.84, 95% CI: 1.48-2.29; OR: 1.25, 95% CI: 1.03-1.51). No differences in the odds of delayed treatment by insurance status were observed in patients living in high-deprivation areas.

DISCUSSION/CONCLUSION: Insurance does not fully decrease barriers to breast cancer treatment.

ACKNOWLEDGEMENTS: Grant: This study was supported by grant R01CA239120 from the National Cancer Institute (Dr. Aneja). Mentors: Courtney Williams, DrPH and Ritu Aneja, PhD

NOTES

“I Eat Chocolate Milk for Dinner Because We Just Have Nothing in Our Fridge”: The Invisible Burden and Dire Consequences of Food Insecurity for People with Cystic Fibrosis in the United States

Gabriela R. Oates; Soumya Niranjani; Georgia Brown; Julianna Bailey; Robin Geurs; Kate E. Powers; Michael S. Schechter

INTRODUCTION: One-third of people with cystic fibrosis (PwCF) are food insecure, with profound implication for their health. This qualitative study explored lived experiences with food insecurity and perspectives on food insecurity screening in PwCF.

METHODS: We conducted semi-structured qualitative interviews with two key stakeholder groups: adults with CF and caregivers of children with CF. PwCF with previously documented food insecurity were referred for participation by pediatric and adult CF programs across the US. Interviews were recorded and transcribed, and data were coded and analyzed by two independent coders using a content-analysis approach with a constant comparative method to generate themes.

RESULTS: A total of 26 participants from 22 CF programs were interviewed. The sample included 17 adults with CF and 9 parents of children with CF. Participants were predominantly White (88%) and female (92%). Five overarching themes emerged: (1) **Food insecurity is severe and debilitating** (“What you don’t see is Mom returning all these bottles just to afford that dollar box of noodles”; “I skip breakfast and lunch so that she can have whatever it is, and then for supper, we just always feed her first”; “end up being a lot of ramen noodles and macaroni and cheese”); (2) **Extensive financial constraints** imposed by the CF diagnosis and daily therapies contribute to food insecurity (“[Medical bills] just accrue faster than we can pay them off”; “There has been times where my check couldn’t afford to pay a bill, let alone get any groceries” “It’s hard to gain weight when you are having to worry about making your food last to the end of the month”); (3) **Existing resources and programs** to combat food insecurity are insufficient (“They just nod their heads and don’t give me any solutions”; “I don’t think they quite fully grasp it”; “We never qualify”); (4) **Shame and stigma** engulfs conversations around food insecurity with CF care teams (“I already, when I go to clinics, feel very judged”; “We constantly feel like we’re a burden”); (5) **Food insecurity screening is critical** in clinical settings (“If they didn’t ask me, I woulda never found the help”); recommendations may differ between pediatric and adult programs.

CONCLUSIONS: Food insecurity among PwCF is invisible, but its consequences are dire. Assistance is limited, screening is inconsistent, and stigma is widespread. There is an urgent need to normalize food insecurity screening and expand food assistance programs for PwCF.

Food insecurity screening, local food access, and state food assistance policies: contributions to nutritional outcomes across CF programs in the United States

Elizabeth Baker;¹ Julianna Bailey;¹ Michael S. Schechter;² Keith Robinson;³ Kate E. Powers;⁴ Elliot Dasenbrook;⁵ Monir Hossain;¹ Georgia Brown;⁶ Gabriela R. Oates¹

¹ The University of Alabama at Birmingham, Birmingham, AL

² Virginia Commonwealth University, Richmond, VA

³ University of Vermont Children’s Hospital, Burlington, VT

⁴ Albany Medical College, Albany, NY

⁵ Cleveland Clinic Respiratory Institute, Cleveland, OH

BACKGROUND: Optimizing weight is an important treatment goal for people with cystic fibrosis (CF), as underweight is associated with worse pulmonary outcomes and decreased survival. There is ample evidence that the nutritional status of people with CF is closely associated with their socioeconomic status. In this study, we assessed the contributions of CF program-level food insecurity screening practices and area-level food access for nutritional outcomes among people with CF.

METHODS: We conducted a cross-sectional analysis of 2019 data from the national CF Patient Registry (CFFPR), linked to survey data on CF program-level food insecurity screening (frequency, modality, and tracking) collected from pediatric and adult CF programs in the United States, and data on local food access from the USDA Food Atlas. Nutritional outcomes were assessed with annualized BMI percentiles (CDC charts) for children and BMI (kg/m²) for adults, and with underweight status defined as BMIp <10% for children and BMI <18.5 kg/m² for adults.

RESULTS: The study population included 11,971 pediatric and 14,817 adult patients with CF. Among children, food insecurity screening at every visit was associated with lower odds of being underweight (OR 0.69, p=0.041), and the relationship remained statistically significant after adjusting for sociodemographic and clinical covariates (aOR 0.64, p=0.044). Among adults, screening in writing (vs verbally) was associated with higher BMI after adjusting for socio-demographic and clinical covariates (0.46, p=0.030). Residence in a food desert was associated with a 3.3-point lower BMI (-3.30, p=0.005) among children, which remained significant after controlling for covariates; and with nearly twice the odds of being underweight (OR 1.80, p<0.001) among adults, which remained significant in adjusted models; additionally, residence in a food desert was associated with lower BMI in the adult sample (-0.32, p=0.025). In full models including all predictor variables (program-level food insecurity screening and area-level food access), screening at every visit was associated with 39% lower odds of being underweight (OR 0.61, p=0.019) among children, while screening in writing was associated with higher BMI (0.43, p=0.032) among adults. Residence in a food desert was associated with higher odds of being underweight among children (OR 1.66, p=0.036) and adults (OR 1.48, p=0.025), and with lower BMI percentile (-4.81, p=0.004; adjusted -3.73, p=0.014) among children.

CONCLUSION: Both food insecurity screening practices and local food access are important correlates of weight status among children and adults with CF. This is the first report to examine the contributions of food insecurity screening and food access for undernutrition among children and adults with CF in the U.S. Future research should consider state-level variation in food assistance programs and medical nutrition policies for nutritional outcomes in this population.

NOTES

Of all the forms of inequality, injustice in health is the most shocking and inhumane.

MARTIN LUTHER KING, JR.

Hair Cortisol Feasibility and Demographic Correlates in a Sample of Older Adults from Puerto Rico

Ballard, Erin, BA; Turan, Bulent, PhD; Crowe, Michael, PhD

INTRODUCTION: Hair cortisol is increasingly being used as a biomarker of chronic HPA-axis activation. Studies using older adults often exclude a substantial portion of participants due to insufficient hair or non-detectable cortisol levels, but do not provide details on correlates of these factors.

METHODS: We examined feasibility of hair measurement and cortisol detectability in an ongoing study of older adults in Puerto Rico by examining group differences and performing regression analyses.

RESULTS: Among the first 537 participants in the current follow-up of the Puerto Rican Elder Health Conditions (PREHCO) study (now age 78-106 years old), approximately 11% of participants refused to give a hair sample and 20% did not have enough hair to sample. Women (13%) were significantly more likely than men (4%) to refuse hair collection. However, men (47.7%) were significantly more likely than women (4.8%) to not have enough hair. Of participants with enough hair to take a sample (n=372), 23% had non-detectable levels of cortisol. Black participants were the most likely to have non-detectable hair cortisol (43%), followed by multiracial mestizo (32%). The two most common racial categories in our sample, multiracial trigueño (23%), and white (17%) were the least likely to have non-detectable cortisol. In terms of hair products (including frequency of hair washing and use of conditioner, dye, or perm), only the use of chemical hair straighteners was associated with higher likelihood of non-detectable cortisol (38%).

DISCUSSION/CONCLUSION: Findings underscore the importance of measuring hair products when examining hair cortisol in older adults and suggest that older black participants may be disproportionately excluded due to non-detectable cortisol levels.

ACKNOWLEDGEMENTS: This work was supported by Grant RO1 AG1620901 from the National Institute on Aging.

NOTES

Racial Differences in Work-Related Spinal Cord Injury

Banasiewicz, Sarah, BA; Hsu, Kyle; Wen, Huacong, MD, PhD; Turnley, Michelle, MD; Martwitz, Jennifer, MA

INTRODUCTION: Racial/ethnic differences in the frequency of workplace injuries and the prevalence of work-related disabilities are well documented. Little was known about work-related spinal cord injury (SCI) and any racial disparity.

METHODS: This was a cross-sectional analysis of data from the National SCI Model Systems Database, including 5974 participants (763 Hispanic, 1478 Non-Hispanic Black, 3484 Non-Hispanic White, and 249 other) of ages 18-65y between 2010 and 2019. Work relatedness was defined as a SCI occurred in the course of employment. Chi-square and analysis of variance tests were used to compare demographics, injury-related factors, and self-perceived ability of speaking/understanding English across the 4 racial/ethnic groups. Logistic regression was conducted to estimate racial differences in the likelihood of work-related SCI, after controlling for other factors.

RESULTS: Significant differences were noted for demographics, injury-related factors, and English language ability among the 4 racial/ethnic groups. Hispanics were younger as well as were more likely to be male; be employed; have less than high school education; have paraplegic American Spinal Injury Association Impairment Scale A, B or C injuries; and have less English language ability, as compared to other racial/ethnic groups. Work-related injuries were found to occur in 9.7% (n=581) of the SCI participants, with Hispanics having the highest percentage than other racial/ethnic groups (15.6%, $P < 0.001$), especially among those who were male (17.8%, $P < 0.0001$) or injured by falls (41.5%, $P < 0.0001$). After accounting for demographic (age, sex, marital status, and education) and injury-related factors (injury etiologies and SCI severity), Hispanics had a higher likelihood of work-related injury than non-Hispanic Blacks (Odds ratio 1.59, 95% Confidence interval (CI) 1.12-2.24). After adjusting for English language ability, the odds of work-related injury decreased to 1.25 (95% CI 0.87-1.82).

CONCLUSIONS: As the ability of English speaking/understanding explained to some extent of racial differences in work-related SCI, we call for culture-appropriate and multi-lingual programs for occupational safety training to reduce the frequency of catastrophic injuries, such as SCI. Our study findings also provide a foundation for future research to explore other factors that contribute to racial differences in work-related SCI, which could aid in prevention and clinical management.

ACKNOWLEDGEMENTS: This work is supported by funding from the National Institutes on Disability, Independent Living, and Rehabilitation Research (NIDILRR grant #90SIMS0016).

NOTES

Addressing COVID-19 Vaccine Hesitancy and Uptake in Trustworthy Contexts: Developing and Implementing a Church Based Intervention

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INTRODUCTION: The African American church has long been seen as a crucial partner in addressing public health crises. In previous COVID-19 research conducted by our team, pastors and churches were identified as the most trusted sources of information, which corroborates with our past research.

METHODS: We targeted underserved populations in Jefferson County, Alabama to explore vaccine hesitancy using a mixed-methods approach. As part of the parent RADx-UP, we completed surveys (N=997) with individuals to explore COVID-19 vaccine hesitancy and uptake. Then, we leveraged focus groups conducted by Alabama CEAL in August through November 2021 to explore vaccine hesitancy in depth (N=11). Finally, we conducted key informant interviews and short surveys with clergy and church staff (N=9) to discuss factors related to implementation of evidence-based vaccine hesitancy interventions into their churches. Data was analyzed and merged using a joint data display, which was used to build a church intervention, which included a toolkit. We partnered with churches in the target communities to implement the interventions, and collected weekly metrics. We assessed the extent to which the intervention strategies were implemented through surveys and key informant interviews with implementers.

RESULTS: Churches (N=5) made a total of 33 social media posts with a reach of 14,193 Facebook engagements, 1,378 Facebook shares and 167 emails. Churches reached 1,215 individuals through in-person announcements, hosted 20 events with a total of 6,068 attendees, and disseminated 5,227 CEAL produced educational flyers. Vaccine clinics hosted at the churches vaccinated 67 people. Key informant interviews (N=5) indicated that churches found it difficult to engage the population on COVID-19 materials as the community no longer feels a sense of “urgency.” Churches expressed desire to use younger community members to complete COVID-19 vaccination outreach. The intervention toolkit was described as useful in targeting specific audiences.

CONCLUSIONS/DISCUSSION: The results of this study can be applied as we consider the work of churches in promoting vaccinations beyond COVID-19. Although the intervention was reported to come too late in the pandemic, we did find that our church partners showed significant reach through electronic means.

ACKNOWLEDGEMENTS: 45th Street Baptist Church, Greater Shiloh Missionary Baptist Church, Love Fellowship Christian Center, Tabernacle Baptist Church, The Star Church, and The Worship Center. Funding: NIH, #U54MD000502-19S2 Parent Grant: Mona Fouad, MD, MPH, PI; Lori Bateman, PhD (supplement Lead), Allyson Hall, PhD, Lonnie Hannon, PhD, NHLBI, #OT2HL156812 and OTA-6793-02-S002; Principal Investigators: Mona N. Fouad, MD, MPH, Robert Kimberly, MD, Andrea Cherrington, MD, Suzanne Judd, PhD



... National Minority Health Month [April] also serves as a reminder of how much work needs to be done to eliminate health and healthcare inequities.

MICHELLE OBAMA

Endometrial Tumor Classification Using Artificial Intelligence Algorithms

Clark, Alexis, MS (1); Ranganathan Ganakammal, Satishkumar, PhD (2); Jones, Sarah, MS (2); Matthew Beyers, MSc, PMP (2); and Lillard, James W., PhD, MBA (2)

BACKGROUND: Endometrial cancer (EC) is the most common cancer diagnosis of the reproductive organs among women in the United States. EC is characterized by two molecular subtypes (Type I and Type II) with distinct genetic and phenotypic differences. Type I (Uterine Corpus Endometrial Cancer, UCEC) comprises most EC cases and is characterized by PTEN mutations and slow-growing benign tumors. Type II EC (Uterine Carcinosarcoma, UCS) is rare and has frequent P53 mutations and high-grade tumors. Type II EC makes up about 40% of EC deaths and is more common in African American women. In this project, we aim to construct classifiers to distinguish between UCEC and UCS RNA-Seq samples.

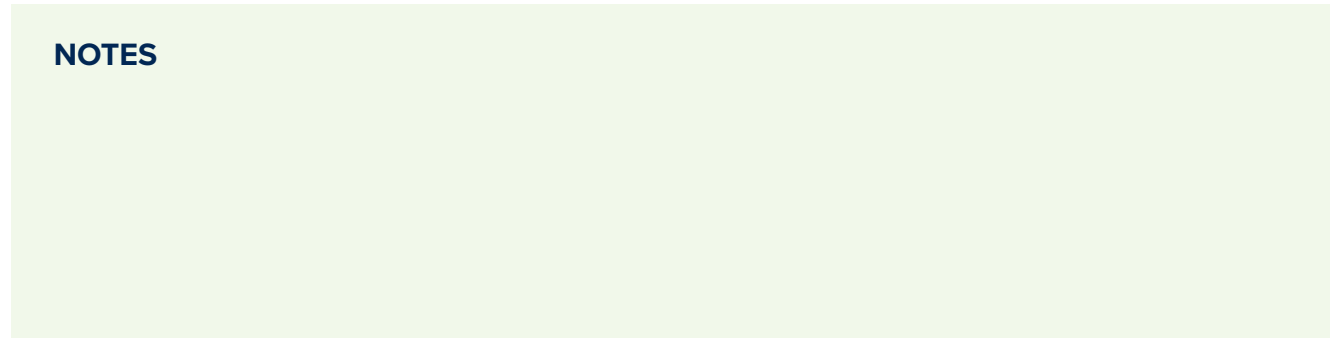
METHODS: We obtained N=643 RNA-Seq EC samples (587 UCEC and 56 UCS) from the Cancer Genome Atlas (TCGA). We used known EC driver genes, P53, PTEN, KRAS, CTNNB1, and FBXW7 for the features of the model because they are shown to be expressed differently in Type I and Type II EC as well as three experimental genes (CXCL13, CXCR5, TFAM). We performed principal component analysis (PCA) to observe sample clustering. We constructed two machine learning models, random forest and logistic regression, and a deep learning model, dense neural network, to classify RNA-seq samples as UCEC or UCS. Accuracy and F1 score were used to compare the models on a test dataset of 129 samples.

RESULTS: PCA depicts the clustering of UCEC and UCS EC tissue types. The heatmap shows TP53 and CTNNB1 had the greatest expression amongst the UCEC and UCS samples. The random forest classification model and dense neural network had accuracy scores of 0.91 and 0.923, respectively, with a recall, precision, and F1 score of 0.0. The logistic regression model had an accuracy of 0.91 with 0.83 precision, 0.91 recall, and a 0.87 F1 score.

CONCLUSION: The logistic regression model performed the best with this dataset. The results of this project lay the groundwork for future studies that may address health disparities, aid the advancement of early detection and diagnosis methods, biomarker discovery, and improve targeted therapies for endometrial cancer patients.

ACKNOWLEDGMENTS: Thank you to Dr. Lillard, Morehouse School of Medicine, my mentors at the Frederick National Laboratory for Cancer Research, and all those who supported this work.

NOTES



Intentionality of Pediatric Firearm Injuries Based on Area Deprivation Index

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AFFILIATIONS: UAB Heersink School of Medicine¹; UAB Pediatric Emergency Medicine², UAB Department of Sociology³, UAB Division of Pediatric Pulmonology⁴, UAB Department of Medicine⁵

INTRODUCTION: Between 2012 and 2014, on average 1300 children under the age of 18 died each year because of a firearm related injury in the United States. Studies have shown that socioeconomic differences influence many health-related issues, including the overall number of firearm related injuries; however, the specific ways in which they affect pediatric firearm injuries is less well known. This study aimed to divide locations into groups based on the Area Deprivation Index (ADI) and assess the intentionality of firearm injuries based on ADI in both rural and urban settings.

METHODS: A retrospective chart review of firearm related wounds was conducted in children ages 0-19 who presented over a twenty-year period (2000-2019) to Children's of Alabama, as well as the local county medical examiner's office. More than twenty variables, including zip code, associated ADI score, associated Rural-Urban Commuting Area (RUCA) code, intentionality, and outcomes, were collected and analyzed. After accounting for the demographic characteristics, a multivariable logistic regression was used to assess for associations between socioenvironmental measures (socioeconomic and rurality) and the intentionality of the shooting.

RESULTS: Those who experienced an intentional shooting had a higher mortality rate compared to those who experienced an unintentional shooting (52.65% vs 12.34%). Those who resided in urban areas have three times the odds of experiencing an intentional shooting (OR: 3.04, 95%CI: 1.55-5.96). Additionally, older children, females, and non-Hispanic Black children were more likely to experience an intentional shooting. Although individuals who lived in urban areas were overall more likely to experience an intentional shooting, it depended on the ADI. In areas with lower ADI, shooting intentionality did not vary by urban status. However, in areas with higher ADI, those residing in urban areas were more likely to experience an intentional shooting.

CONCLUSION: There is a statistically significant increase in odds of an intentional shooting in an urban area as compared to a rural area, but only in low resource (high ADI) areas. More research is needed in this area of pediatric healthcare disparities, as well as ways that this knowledge can be used for more focused and targeted firearm injury prevention tactics.

NOTES

Prevalence of social determinants of health collected using the PRAPARE tool at an academic medical center in the Deep South

Edmond, Katrina S., BA

BACKGROUND: Integrating measures of social and environmental determinants of health (SDoH) into the electronic medical record (EMR) to inform population health has gained momentum in recent years. The Protocol for Responding to and Assessing Patient Assets, Risks, and Experience (PRAPARE) tool was created for the EMR as a standardized patient reported SDoH assessment. Here we report on the prevalence of SDoH in a sample of patients who completed the PRAPARE during an implementation period at an academic medical institution in the Deep South as well as strategies to improve future standardization and implementation.

METHODS: Collection of the PRAPARE was implemented in February 2020 in the institution's ambulatory service. We characterized the study population and summarized responses to PRAPARE questions using descriptive statistics. We hand reviewed any questions endorsed as 'other' to reveal common patterns in the data that might inform question modifications or refine ongoing data collection methods.

RESULTS: A total of n=6,674 PRAPARE assessments were completed between 02.01.2020 and 12.31.2020 [mean age 49 years, female (44.9%)]. Most of our sample was Black (44.1%) or White (49.7%) and nearly all spoke English (95%). Almost 12% had less than a high school education; over half were either unemployed, not seeking work (46.3%) or disabled (18.8%); and 17.6% did not have insurance. In terms of resources, 5.6% indicated being homeless while over 8% reported housing insecurity; 1.5% reported food needs; 14.5% had medicine/healthcare needs; 8.6% needed assistance with utility or phone costs; and 5% reported lacking transportation which kept them from getting medical care. In terms of social and emotional health, over 26% reported high levels of stress and slightly less than 6% indicated social interactions <1/week. Seven percent did not feel safe where they currently resided. Missingness ranged from 0.4% (race) to 20.1% (income). Strategies to improve data quality include methods to reduce missingness in the data, implementing additional training for data collectors, and modifying questions and response categories on the PRAPARE.

CONCLUSION: Multiple sup-optimal social determinants were reported in over 6000 patients in our local health care system. While implementing the PRAPARE in the EMR provides valuable information on social determinants amenable to intervention, strategies to improve accurate and complete reporting of data are needed.

NOTES

Race, Social Determinants of Health, and Comorbidity Patterns Among Participants with Heart Failure in the REasons for Geographic and Racial Differences in Stroke (REGARDS) Study.

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INTRODUCTION: Heart failure (HF) is often accompanied by comorbid conditions. We examined racial differences in comorbidities among patients with HF and the mediating role of social determinants of health (SDOH).

METHODS: Black and White US community-dwelling participants in the REasons for Geographic and Racial Differences in Stroke (REGARDS) study aged = 45 years with an adjudicated HF hospitalization between 2003 and 2017 were included in this cross-sectional analysis. Comorbidities were abstracted from HF hospitalization records. We estimated age- and sex-adjusted prevalence ratios (PR) for comorbidities comparing Black to White participants. Guided by the Healthy People's 2030 framework, SDOH including income, education, marital status, rural residence, ZIP code-level poverty, marital status, healthcare provider shortage area and poor public infrastructure were considered as potential mediators using the inverse odds weighting method.

RESULTS: Among participants with a HF hospitalization, the median age was 79 (IQR: 73 - 85) years and 74 (67 - 80) years for White and Black adults, respectively. Black (n = 230) compared to White (n = 276) participants with HF with preserved ejection fraction (HFpEF) had higher prevalence of diabetes [1.46 (95% CI: 1.24 - 1.72)], anemia [1.42 (95% CI: 1.08 - 1.88)], and chronic kidney disease [1.28 (95% CI: 1.06 - 1.54)], and lower prevalence of atrial fibrillation [0.86 (95% CI: (0.75 - 0.99)), coronary artery disease [0.80; 95% CI: 0.65 - 0.98]], and depression [0.30 (95% CI: 0.18 - 0.51)]. Black (n = 332) compared to White (n = 410) participants with HF with reduced ejection fraction (HFrEF) had higher prevalence of hypertension [1.05 (95% CI: 1.02 - 1.08)] and diabetes [1.20 (95% CI: 1.05 - 1.37)], and lower prevalence of coronary artery disease [0.86 (95% CI: 0.79 - 0.94)], atrial fibrillation [0.70 (95% CI: 0.59 - 0.84)], depression [0.59 (95% CI: 0.39 - 0.89)], and respiratory disorders [0.77 (95% CI: 0.63 - 0.93)]. Socioeconomic status explained 32% of excess chronic kidney disease among Black adults with HFpEF; no other mediation analyses were statistically significant.

CONCLUSIONS: There were racial differences in the patterns of comorbidities among REGARDS participants with HF, with low income and education partly explaining the higher prevalence of diabetes and chronic kidney disease among Black adults with HFpEF.

NOTES

Racial & ethnic differences in social determinants of health factors among women with gestational hypertension

Enyinda, Victoria, MPH; Clarke, Melinda, MS

INTRODUCTION: Currently, preeclampsia is the second highest cause of maternal mortality among all racial and ethnic groups (Lo et al., 2013). Preeclampsia is the most common complication associated with gestational hypertension (GHTN) and it occurs in half of all women diagnosed with GHTN (Sutton et al., 2018). Studies have shown that adverse pregnancy outcomes in African American women, such as preeclampsia, are often attributed to negative Social Determinants of Health (Shah et al., 2021). The purpose of this study is to investigate the association of race/ethnicity with Social Determinant of Health experiences among adult women of reproductive age within the United States experiencing gestational hypertension.

METHODS: In 2017, 18 states employed the optional "Social Determinants of Health" module within the annual administration of the Behavioral Risk Factor Surveillance System (BRFSS). Analyzing the 2017 BRFSS, data from 685 women of reproductive age (18 - 44 years) investigated the independent association of race/ethnicity (i.e. Non-Hispanic White, Non-Hispanic Black, Hispanic, & Other) with Social Determinants of Health experiences testing for differences in proportions.

RESULTS: Using 2017 BRFSS data, an estimated 606,053 women experienced gestational hypertension while pregnant within the 18 participating states. Significant differences were observed by race/ethnicity regarding challenges to pay mortgage, rent, or utility bills during the last 12 months (p = 0.0002). Stable housing was also a concern, with significant differences observed for number of times moving from one home to another during last 12 months (p = 0.0014). Although differences observed by race/ethnicity regarding ability to buy enough food approached significance (p = 0.089), having enough monthly finance status (p = 0.0049) and 30 day stress levels (p = 0.0043) were significant.

CONCLUSIONS/DISCUSSION: The Community Preventive Services Task Force recommends exercise programs for pregnant women to reduce the development of high blood pressure in pregnancy. However, research suggests contextual factors may also determine high blood pressure during pregnancy. Thusly, working in alignment with the 2020 Surgeon General's Call to Action to Control Hypertension with a focus on Goal 2: Ensure that the place where people live, learn, work, and play support hypertension control becomes increasingly important.

ACKNOWLEDGEMENTS: This research would not have been possible without the exceptional support of my mentor, Dr. Larrell Wilkinson.

NOTES

Association between Food Insecurity and Frailty among Older Adults with Gastrointestinal Malignancies - The CARE Registry

Fowler, Mackenzie E., PhD; Harmon, Christian, MD; Sharafeldin, Noha, MD, MSc; Giri, Smith, MD, MHS; Williams, Grant R., MD, MSPH

INTRODUCTION: Food insecurity is associated with higher gastrointestinal (GI) cancer mortality but its association with frailty, a known predictor of premature mortality among older adults with cancer, is less understood. Our objective was to evaluate the association between food insecurity and frailty among older adults with GI malignancies.

METHODS: We included 424 older adults ≥ 60 y recently diagnosed with GI cancer undergoing self-reported geriatric assessment (GA) at first pre-chemotherapy visit to the UAB oncology clinic. Food insecurity was the exposure, using the 2019 United States Department of Agriculture Economic Research Service (USDA ERS) Low-Income, Low-Access (LILA) measure, which classifies census tracts on income and/or access to food stores at various distances by urban-rural status. The primary outcome was frailty on the CARE Frailty Index, a composite of the proportion of deficits across GA measures (44 total items). Frailty was dichotomized as frail or robust/pre-frail. We examined the LILA-frailty association with modified Poisson regression accounting for census tract clustering.

RESULTS: Median age was 69 (IQR: 64, 76), 56.6% were male, 27.2% non-Hispanic Black, 31.4% had colorectal, 28.1% had pancreatic cancer, and 71.7% presented with stage III/IV disease. A higher proportion in LILA versus non-LILA areas were non-Hispanic Black (52.1% vs. 11.0%, $p < 0.001$) and lower educated (high school or less: 50.6% vs. 35.0%, $p = 0.020$). Adjusting for age, race, sex, cancer type and stage, LILA was associated with 37% higher risk of frailty (RR: 1.37, 95% CI: 1.05, 1.80) versus non-LILA. Analysis of LILA sub-categories revealed the overall effect may be driven by low income+low access at 1 mile for urban/10 miles for rural areas (RR: 1.47, 95% CI: 1.12, 1.94) and low income+low access at 0.5 mile for urban/10 miles for rural (RR: 1.39, 95% CI: 1.05, 1.85).

CONCLUSIONS: Low income and low access to food stores is associated with higher risk of frailty among newly diagnosed older adults with GI cancers prior to systemic treatment. Intervening on food insecurity at the local level, particularly those with LILA, may be a target for improving rates of frailty and promoting health equity in this population. Future studies are needed to determine causality.

ACKNOWLEDGEMENTS: Mackenzie E. Fowler, PhD receives support from the Agency for Healthcare Research and Quality (AHRQ) 5T32HS013852 (M. Mugavero, PI). This work was supported by the National Institutes of Health (K08CA234225, G. Williams, PI) and the Doris Duke Charitable Foundation Caregiving Affected Research Early-career Scientists (CARES) Retention Program at UAB.

Base excision repair defects alter DNA damage landscape in prostate cancer

Gassman, Natalie R., PhD¹; Goel, Kaveri, PhD¹; Sonavane, Manoj, PhD¹; Krieger, Kimiko, PhD²; Canete Portillo, Sofia, PhD³; Magi-Galluzzi, Cristina, MD³; and Sreekumar, Arun, PhD²

INTRODUCTION: Prostate cancer is the most diagnosed cancer among men in the United States. African American men are diagnosed with and succumb to prostate cancer at higher rates than other demographic groups. However, the biological drivers contributing poorer outcomes in African American men compared to European American men with prostate cancer are still poorly defined. One understudied area is DNA repair defects, which drive genomic instability in cancer. Defects in homologous recombination are often at the forefront of repair defects examined and exploited for therapeutic intervention. However, defects in other DNA repair pathways may contribute to poor disease outcomes and chemoresistance. We previously demonstrated that defects in the base excision repair (BER) pathway contribute to chemoresistance and alter growth in breast cancer.

METHODS: Examination of the TCGA database show dysregulation of key BER protein like X-ray cross complementing protein 1 (XRCC1) and DNA polymerase β (POL β) are common across several cancers. Therefore, we decided to explore DNA damage and repair defects in prostate cancer to explore if altered DNA repair contributes to poorer outcomes in African American men. We employed a novel DNA damage measurement assay, Repair Assisted Damage Detection (RADD), in African and European American prostate tumors. We examined the DNA lesion characteristics of the tumor and correlated regions of DNA damage to protein markers. Finally, we examined cell models to map the chemotherapeutic response of these expression patterns.

RESULTS: African American patients have more uracil and pyrimidine DNA damage. The BER pathway repairs uracil damage. Uracil DNA glycosylase (UNG) removes the uracil base then XRCC1 and POL β are recruited to restore genomic stability. Elevated levels of UNG with reduced levels of XRCC1 occur in African American tumors compared to European American tumors. This imbalance in BER enzymes indicates a defect in the BER pathway. Using cell models, we observe the expression of XRCC1 and a shift in the expression of UNG isoforms, which may also impact genomic stability, specifically in African American tumors. We also demonstrate that reduced XRCC1 expression improves response to PARP inhibitors, which are being tested clinically for the treatment of prostate cancer.

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NOTES

Clinical Effort Against Smoke Exposure in CF (CEASE-CF): feasibility, acceptability, and preliminary efficacy

Gabriela Oates; Robin Geurs; Cathy Mims; Stephanie Gamble; Elizabeth Baker; Brittany Woods; Elizabeth Coleman; Steven Rowe; Sigrid Ladores

BACKGROUND: Despite documented adverse effects, tobacco smoke exposure (TSE) affects at least one-third of pediatric patients with CF in the U.S., with higher rates in other countries. Current CF clinical practice guidelines recommend avoiding TSE but provide little guidance on the tailoring and implementation of smoking cessation strategies. Our formative research revealed multilevel barriers among CF caregivers and providers regarding smoking cessation interventions in clinical settings.

METHODS: We developed, implemented, and evaluated Clinical Effort Against Smoke Exposure in Cystic Fibrosis (CEASE-CF), a smoking cessation intervention tailored to the needs of CF caregivers and delivered in clinical settings by a trained tobacco treatment specialist (TTS) integrated in the multidisciplinary CF care team. Feasibility, acceptability, and preliminary efficacy were tested in a single-center, randomized, open-label study design with a 2:1 parallel assignment (NCT04777344). Study participants were smoking caregivers of pediatric patients with CF; participation of multiple smokers in a household/extended family was allowed. The intervention arm received CF-specific TSE education, intake assessment (readiness to quit, needs and barriers to quitting, motivational interviewing), as well as tobacco treatment plan including nicotine-replacement therapy and behavioral counseling in 12 sessions over 6 months. The control arm received TSE education only (current standard of care). Both groups provided child hair samples at baseline, 3-, and 6-months and completed baseline and follow-up surveys. Measured at 6 months, primary outcomes were feasibility (recruitment and retention rates) and acceptability (perceived effectiveness and satisfaction among caregivers and providers), while secondary outcomes were smoking cessation (7-day point prevalence, cigarettes/day in past 7 days) and child hair nicotine concentrations (ng/mg). Demographics, smoking history, nicotine dependence (Fagerstrom), and perceived stress (PSS-14) were collected at baseline.

RESULTS: Educational resources on the harms of TSE in CF (video, brochure, clinic posters) and protocols for TTS integration, documentation, and intake assessment/follow-up were developed. From Jul 2021 to Sep 2022, 36 participants (24 intervention, 12 control) completed the study. Feasibility was high, with 64% recruitment and 100% retention rates. Acceptability was high, with 72% of caregivers 'extremely satisfied' and 'extremely likely' to recommend CEASE-CF, and 67% finding the intervention 'extremely helpful'. Clinical providers (n=19) mean score was 4.7 (1-5 scale) across the domains of satisfaction, real-world implementation, and recommendation for other clinics. At 6 months, 18% of study participants were fully quit, and 78% had 35% reduction in 7-day point prevalence (mean daily cigarettes decrease from 14 to 9). By 3 months, 4/12 (33%) control group participants requested (and were allowed, for ethical reasons) to receive the intervention. Child hair nicotine data are under analysis, as are qualitative interviews with caregivers (n=12) and providers (n=10) to assess implementation barriers and inform optimization.

CONCLUSIONS: CEASE-CF showed high feasibility, acceptability, and preliminary efficacy. CEASE-CF may help improve CF outcomes and inform tobacco prevention and treatment efforts in this population. For multi-site efficacy trial, alternative study design with cluster randomization should be considered.



Our lives begin to end the day we become silent about things that matter.

MARTIN LUTHER KING, JR.

Diet and Physical Activity Attitudes among Colorectal Cancer Survivors living in a Lower-Middle Income Country

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INTRODUCTION: Colorectal Cancer (CRC) is the seventh most common neoplasm in Egypt, with a high incidence among populations younger than 50 years old. The survival rate of metastatic CRC has increased due to the introduction of new chemotherapeutics and targeted agents. Thus, addressing lifestyle factors, e.g., physical activity and healthy diets that are positively associated with better quality of life in CRC survivors is warranted.

In this study, we aimed at identifying barriers and facilitators related to healthy eating and being physically active among Egyptian CRC survivors, which, in turn, can inform patient-centered interventions.

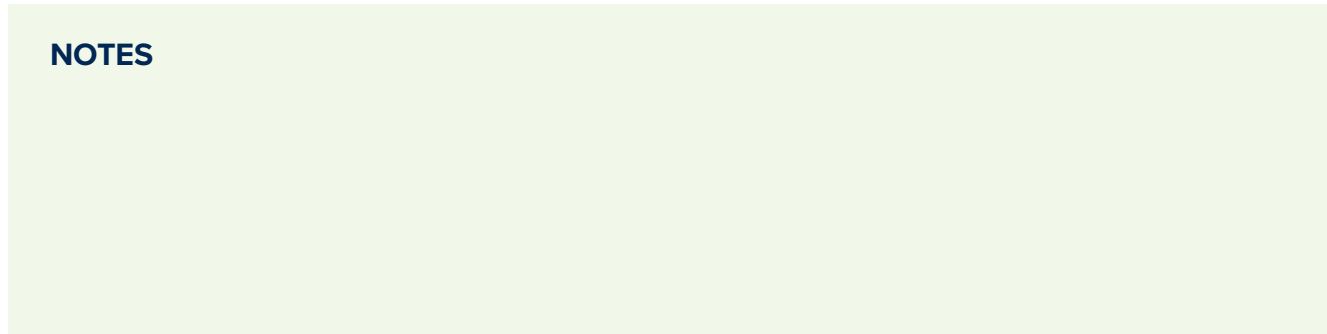
METHOD: Telephone interviews were conducted with CRC survivors who received and completed their treatment at Alexandria's main university hospital. The interviews were semi-structured, conducted in Arabic, and audio recorded, then transcribed and translated into English. The interviews were analyzed by two investigators using thematic analysis.

RESULTS: Eleven interviews were conducted with five men and six women. The average age was 49 (range 36 to 69). Most interviewees reported little formal education and no health insurance. Participants' definitions of healthy diets were limited to increasing vegetables and fruits and decreasing fat and carbohydrate consumption. The most frequently endorsed barriers to a healthy diet were cost, lack of guidance from their physician about what to eat, and gastrointestinal effects of chemotherapy. Facilitators were identified as providing financial and educational support. Regarding physical activity, most participants were not able to describe or define the term and many patients expressed the idea that fulfilling their daily needs and looking after their children defines them as being sufficiently physically active. Barriers to physical activity included the effects of chemotherapy and cancer-related health issues, poor mental well-being, and lack of motivation. Furthermore, overcrowded and unsafe neighborhoods were significant limitations to physical activity. Providing an adequate place for physical activity and having social support were mentioned as facilitators.

CONCLUSION: Initiatives to promote information regarding a healthy diet and physical activity and aid in purchasing healthy foods can improve quality of life for CRC survivors in Egypt.

ACKNOWLEDGEMENTS: This work was funded by National Academy of Science, NAS 2000007148 and STDF-USC17-144 awarded by Mona N. Fouad and Waleed Arafat, respectively.

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Employing a collaborative, participatory approach to survey COVID-19 knowledge, attitudes, behavior and life experiences among racial/ethnic minorities and other socially vulnerable populations.

Hopkins, Jammie, DrPH; Li, Chaohua, MPH; Daniel, Ashley, MS; Hall, Christine, MS; Gaglioti, Anne, MD, MS; Heard, Rochelle, MPH; Caplan, Lee, MD, MPH, PhD; Mack, Dominic, MD, MBA

INTRODUCTION: The COVID-19 Health Assessment and Mitigation Planning Survey (CHAMPS) was initiated to collaborate with partners representing several priority populations (e.g. Racial/ethnic minorities, rural residents, immigrants, disabled, justice-involved) to assess community perceptions, lived experiences, and priority needs related to COVID-19 prevention and care. This presentation will describe the process employed by The National COVID-19 Resiliency Network (NCRN) to develop CHAMPS and explore survey results.

METHODS: CHAMPS was developed collaboratively by partners from academia, government, health and human services, advocacy, and community-based organizations. The team developed the survey through an iterative process involving critical review of existing COVID-19 surveys and assessments, ideation and feedback sessions, and survey draft pilot testing. CHAMPS assessed COVID-19 knowledge, testing, vaccination, and risk mitigation behaviors; experiences in health care during the COVID-19 pandemic; and COVID-19's impact social, family, and economic life. CHAMPS was hosted online and promoted via email, social media, community meetings, and the strategic mobilization of network partners and community health workers. We used a multi-step validation process to authenticate survey responses.

RESULTS: CHAMPS yielded 611 validated responses in 31 US states. Hispanic and Non-Hispanic Black (NHB) respondents reported higher adherence to COVID-19 mitigation strategies such as mask wearing and social distancing compared to Non-Hispanic White (NHW) respondents. NHW participants reported higher vaccination rates (81.44%) than NHB (62.92%) and Hispanic (76.28%) participants. Approximately 22% of respondents reported delays in their regular health care due to COVID-19. Hispanics and NHB respondents reported higher delays in their regular health care, lost household income, worse food and life essential access, and more deaths in the family and social isolation due to COVID-19 than NHW respondents.

CONCLUSIONS/DISCUSSION: Differences in COVID-19 knowledge, behaviors, and social/health impacts were revealed across NBH, NHW, and Hispanic survey respondents. Lessons learned from the first year of CHAMPS informed the development and administration of a second CHAMPS survey completed in late 2022.

ACKNOWLEDGMENTS: This work was supported in whole by a \$40 million award from the U.S. Department of Health and Human Services Office of Minority Health as part of the National Infrastructure for Mitigating the Impact of COVID-19 within Racial and Ethnic Minority Communities (NIMIC). Grant #: 1CPIMP201187-01-00.

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Neighborhood Social Vulnerability and Lung Function Decline in Chronic Obstructive Pulmonary Disease: Longitudinal Analysis of Electronic Medical Records Data

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RATIONALE: Disparities in COPD outcomes by socioeconomic status have been well documented, but the effect of neighborhood social vulnerability for lung function decline in this population has not been explored. Using Electronic Medical Records data, we assessed the contributions of neighborhood vulnerability for initial lung function and lung function change over time in patients with COPD.

METHODS: Data on individuals with COPD were extracted from the University of Alabama at Birmingham Health System (2010-2020) using diagnostic codes. Pre-bronchodilator lung function was measured with absolute and % predicted (pp) values of forced expiratory volume in one second (FEV1). Residential addresses were geo-linked to the CDC Social Vulnerability Index (SVI), constructed from 15 variables aggregated to Census tracts; SVI percentiles were categorized into quintiles. The effect of SVI on baseline FEV1 and annual FEV1 change was estimated with multivariable linear mixed models. To understand which aspects of neighborhood vulnerability are most consequential for lung health in this population, we assessed both overall SVI scores and four SVI sub-scores (socioeconomic status; household composition and disability; minority status and language; and housing and transportation). All models were adjusted for patient demographics (age, sex, race, ethnicity), marital status, smoking status, obesity, and comorbidities.

RESULTS: The complete case sample included 11,767 patients, of them 54% (n=6,359) with more than one FEV1 measure. Mean baseline ppFEV1 of the latter sample was 69.5% (SD 23.38), mean annual decline 1.3%. In fully adjusted models, neighborhood vulnerability was significantly associated with lower baseline ppFEV1: overall SVI (-6.9%, p<0.0001), socioeconomic status (-7.5%, p<0.0001), household composition and disability (-5.3%, p<0.0001), housing and transportation (-3.9%, p<0.0001), and minority status and language (-2.4%, p=0.0047), and greater annual decline in ppFEV1: overall SVI (-0.9%, p<0.01), housing and transportation (-0.8%, p<0.01), socioeconomic status (-0.8%, p<0.01), minority status and language (-0.5%, p<0.05). Model fit statistics indicated that stronger effects for baseline lung function than annual decline.

CONCLUSIONS: In people with COPD, neighborhood vulnerability is associated with lower baseline lung function and greater lung function decline after adjusting for patient demographic and clinical characteristics. The largest contributors to lung function deficits are socioeconomic status and household composition and disability and, with additional negative consequence of housing and transportation and minority status and. These risk factors can be used as intervention targets in future research seeking to ameliorate the adverse effects of the social environment on lung health.



Inequities in power, money, and resources give rise to inequities in the conditions of daily life, which in turn lead to inequities in health.

MICHAEL MARMOT

Sexual and Reproductive Health Training for Adolescents in Uasin Gishu County, Kenya

Grace Jepkemboi, PhD; Irene Chesire, PhD; Aisha Tepede, MS; and Kashiya Mwanguma, MS

One of the most pressing issues in the field of Adolescent Sexual and Reproductive Health (SRH) is a better understanding of sexual behaviors of adolescents. Adolescents may be more likely to engage in risky sexual behaviors which may expose to sexually transmitted infections (STIs) including HIV, and adolescents living with HIV (ALWHIV) are at risk for re-infection with potentially more resistant strains of HIV. Moreover, from a public health standpoint, ALWHIV who are not virally-suppressed can spread the virus to others and in turn increase incidence of HIV. In addition, compared with adults, adolescents are at higher risk of illness and death from reproductive causes, including early pregnancy, unsafe abortions, and HIV and other STIs. The purpose of this research training project was to empower adolescents with knowledge of SRH in HIV and stigma reduction through a peer mentorship program. Thirty peer mentors purposively selected and 270 adolescents, ages 14-19, in forms one to three at ten secondary schools in Eldoret metro area, Uasin Gishu County, recruited through simple random sampling participated in the study. Peer mentors were supported to disseminate SRH education to other adolescents in their schools. Data was collected using pre-test and post-test questionnaires. The paired sample t-Test was used to evaluate the effect of the SRH mentorship program. Results showed an increase in knowledge of HIV and AIDS (from 39.6% to 61.6%); increase in knowledge of where to access HIV treatment (14.8% to 32.2%); and increase in HIV/AIDS stigma coping skills (21.9% to 42.9%). The ultimate goal to equip adolescents with knowledge and skills to make healthy and informed sexual and reproductive choices and live long and productive lives was achieved.

Hidradenitis Suppurativa: Creating a Database to Evaluate Comorbidities in this Patient Population at UAB

Jiminez, Victoria, BS; Weir, Sydney, BS; Saleem, Mohammad, MS; Yusuf, Nabiha, PhD

INTRODUCTION/BACKGROUND: Hidradenitis suppurativa (HS) is a chronic inflammatory disease characterized by recurrent intertriginous lesions that are often painful. HS has been associated with several comorbid conditions including metabolic and cardiovascular disease. In recent years, studies have found associations between HS and obesity, alcohol, smoking, hypertriglyceridemia, diabetes, and metabolic syndrome. Despite these studies, specific relationships between HS and metabolic/ behavioral factors have not been elucidated. In this study, we seek to further characterize and understand HS and its associated comorbidities, medication regimen, disease severity, and lab work trends.

METHODS: We performed a single institution retrospective study involving all patients diagnosed with HS identified through our i2b2 database. Patients 18 years or younger were excluded and patient information was collected using ICD-10 and SNOMED codes. Information was stored in a secure spreadsheet. Statistical analysis will be performed by researchers after the completion of data collection.

RESULTS: Results from this study are currently being generated and will be available by time of symposium. Data outputs will include demographic characteristics of the cohort, alcohol and tobacco use patterns among the cohort, and metabolic lab findings.

CONCLUSIONS/DISCUSSION: We hope to support our hypothesis in that HS patients have higher rates of smoking, alcohol use, and metabolic syndrome markers than the general population.

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Depression Trend among Adolescents in Mississippi: The Youth Risk Behavior Surveillance System (YRBSS), from 2013-2014 to 2019-2020

Bhuiyan Azad R, MD, MPH, PhD; Kabir Nusrat, MD, MPH; Mann Joshua, MD, MPH

BACKGROUND: Depression among adolescents is a significant public health concern in Mississippi as it is a major risk factor for obesity, suicide and one of the leading causes of death in this age group. Research showed 11.3% of youth aged 12-17 years are depressed in Mississippi and varied by gender and race/ethnicity. Therefore, trends and the prevalence of depression among adolescents by race/ethnicity should be addressed.

OBJECTIVE: The study's purpose was to examine 1) the racial trend in depression and, 2) the gender-specific trend of depression among adolescents in Mississippi from 2013 to 2019. Methods: Data were extracted using the CDC's Youth Risk Behavior Surveillance System (YRBSS) from 2013 through 2019. Proc survey frequency and proc survey logistic regression model were applied using SAS version 9.4.

RESULTS: Of a total sample of 4,994 adolescents, the prevalence of depression among Whites, Blacks, Hispanics, and all other races were 15.4%, 13.8%, 0.66%, and 0.86% respectively. Concerning the depression trend, depression among Whites was 9.7% in 2013, 10.9% in 2015, and 11.4% in 2019 ($p=0.02$ for linear trend adjusted for gender). In the case of females, depression was 12.7% in 2013, 12.8% in 2015, and 13.8% in 2019 ($p=0.02$ for linear trend). There was no significant increase in depression in males and minority races.

CONCLUSION: This finding emphasizes that depression is increasing among Whites and female adolescents in Mississippi. Preventive measures are necessary to address and combat the increasing depression trend targeting White and female adolescents. Learning Objectives 1. Identify depression trends among adolescents in Mississippi. 2. Emphasize prevention strategy to curb depression prevalence among White and female adolescents.

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Assessment and Intervention for HIV Risk in the Emergency Department

Sanika Kamble, MS (Role: Presenting Author) Lauren Walter, MD (Role: Author), Emily L. Turner (she/her/hers) (Role: Author), Joel B. Rodgers (Role: Author), Delissa Hand, MPH, LICSW (she/her/hers) (Role: Author), Michael Fordham, BA (he/him/his) (Role: Author)

BACKGROUND AND OBJECTIVES: HIV remains a public health concern in the US. Comprehensive prevention services (CPS), including risk assessment and referral, has been identified as a key component to 'Ending the HIV Epidemic.' The Emergency Department (ED) represents a unique medical setting which often caters to cohorts who may not otherwise have access to risk assessment services. This project sought to identify and intervene upon the at-risk for HIV population in the ED.

METHODS: A prospective, cross-sectional study was conducted from 11/2021 - 11/2022. Either of two screening methods were subjected to HIV negative adults: 1) manual electronic medical record (EMR) review and 2) EMR generated alerts. Manual review considered real-time chief complaints related to unsafe sexual practice and/or injection drug use (IDU). Weekly EMR alerts identified potential high-risk HIV negative individuals, flagged due to confirmed sexually transmitted infection (STI) or a positive urine drug test within 12 months of ED visit. Identified patients were approached real time in the ED (manual review) or via phone call (EMR alert). Persons confirmed at risk for HIV were provided counseling regarding HIV risk behaviors and direct referral for CPS clinic follow-up. Primary outcome was CPS follow-up.

RESULTS: 133 patients were engaged, 91 in-person and 40 via phone. Ninety were confirmed 'at-risk for HIV;' majority were white (61.1%), male (66.7%), between ages of 18 to 49 (87.8%), uninsured (45.6%), and without a primary care provider (93.3%). Sexual behavior was identified as a risk factor in 76 patients and IDU was a risk factor in 15 patients. Approximately one-third (34.4%) were unaware of their current risk for HIV. Forty-one expressed interest in post-ED linkage to CPS follow-up. To-date, nine patients have connected to a CPS counsellor via phone; three of these individuals report subsequent outpatient appointments to discuss CPS with a medical provider, and one additional patient has had confirmed follow-up with a CPS project partner (4.4% CPS follow-up amongst at-risk).

CONCLUSION: Manual and EMR screening tools can aid in the identification and engagement of persons at risk for HIV in the ED. Likewise, while definitive linkage is low, a CPS intervention in this setting is feasible. Additional linkage hurdles, to include lack of insurance and/or primary care provider, may heavily impact patient capacity to obtain subsequent CPS care.

NOTES

Diet quality profiles and associated risk factors among adults with HIV

Katundu, Mari, MS; Webel, Allison, PhD, RN, FAAN; Cleveland, John, PhD; Long, Dustin, PhD; Oliveira, Vitor, PhD; Horvat Davey, Christine, PhD, BSPS, RN; Crane, Heidi, MD, PhD; Ruderman, Stephanie, PhD; Buford, Thomas, PhD; Fleming, Julia, MD; Mayer, Kenneth, MD; Burkholder, Greer, MD; Gripshover, Barbara, MD; Saag, Michael, MD; Willig, Amanda, PhD, RD

INTRODUCTION: HIV infection leads to increased risk for chronic diseases which could be reduced through modifiable lifestyle factors including improved diet quality. However, people with HIV (PWH) in the United States report lower socioeconomic status, higher unemployment, and increased risk for food insecurity compared to the general population without HIV infection. Diet quality is rarely measured among PWH, thus this study aims to describe diet quality in PWH and identify demographic, clinical and social factors associated with higher diet quality.

METHODS: Participants were recruited at four sites of the observational PROSPER-HIV study (R01NR018391). Dietary intake was recorded via three 24-hour diet recalls and analyzed to determine average daily nutritional intake. The Healthy Eating Index-2015 (HEI-2015) was computed with a total score range of 0-100, with a score ≥ 80 indicating good adherence to the Dietary Guidelines for Americans. Demographic/clinical characteristics and self-reported HIV Symptom Index were abstracted from the CFAR Network of Integrated Clinical Systems dataset. Association of variables with diet quality was analyzed with multiple linear regression modeling.

RESULTS: The 491 participants were median 54 years old, 23.6% Female, 55.0% Black, 9.4% Hispanic. Daily median consumption of macro- and micronutrients, including dietary fiber (14.2grams) and protein (0.9gm/kg), did not meet dietary recommendations for PWH. The median HEI-2015 score was 47.1, and only two participants scored 80 or above. HEI scores were divided into Low (median 37.0), Mid (47.1) and High (60.7) tertiles. Distinct differences in all HEI-2015 food group sub-component scores were observed ($p < 0.01$), with the High HEI tertile consuming significantly more total fruit, total vegetables, beans, and plant protein, but fewer foods containing added sugars and refined grains. In multivariable models, younger age ($p = 0.02$), Black race ($p < 0.01$), and self-reported pain symptoms ($p = 0.06$) were associated with lower HEI score.

CONCLUSIONS/DISCUSSION: Diet quality was lower than expected across all participants, yet meaningful differences in food group consumption were still observed across HEI-2015 tertiles. Interventions to improve diet quality addressing unique nutrition needs of PWH are warranted, particularly for those who are younger, report Black race, or struggle with pain symptoms.

ACKNOWLEDGEMENTS: Funding for this study provided by the National Institute of Nursing Research [R01NR018391], National Institute of Allergy and Infectious Disease CNICS Research Network [R24-AI067039] at the National Institutes of Health.

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Sexual minority groups and depressive symptoms in the Mississippi adolescents - Findings from the analysis of the Youth Risk Behavior Surveillance System (YRBSS), 2019.

Kaur, Inder, MD; Bhuiyan, Azad, MD MPH Ph.D.; Mann, Joshua, MD MPH; Williams, Brian, MD MPH; Zhang, Lei, PhD MBA,

INTRODUCTION: Major depression is the most common mental health disorder in the United States and is the strongest risk factor for suicide. Sexual identity minorities are at an increased risk of depression due to a negative societal attitude, social stigma, discrimination and social inequalities.

METHODS: The aim of this epidemiologic study was to determine the proportion of Mississippi public high school students belonging to different sexual identity groups, by race, gender and school-class grades (9th-12th grade) and to examine the association with depression symptoms. We did a statistical analysis on a 2019 YRBSS survey of Mississippi adolescents (N=1,713) using complex survey module in IBM SPSS statistics, version 28.0. Sexual identity of Mississippi high school students was assessed as Heterosexual vs Sexual Minority-Lesbian/Gay & Bisexuals vs Unsure and depression was assessed from self-reported questionnaire. Weighted percentages and cross tables with 95% Confidence Interval (CI) were determined. Chi-square analysis was done, Likelihood ratios & p-values were reported.

RESULTS: 11.1% (CI: 8.8%- 13.9%) of White Americans, 14.3% (CI: 12.2%-16.7%) of Black/African Americans, 14.0% (CI: 8.5%-22.3%) of Hispanics identified as sexual minority groups (p -value $< .04$). Among females 18.5% (CI: 16.4%-20.7%) and 6.9% (CI: 5.0%-9.4%) of males identified as sexual minority group (p -value < 0.001). In addition, 64.4% (CI: 55.5%-68.9%) of sexual minority group vs 31.4% (CI: 29.2%-33.8%) in the heterosexual group felt sad or hopeless (p -value < 0.001).

CONCLUSIONS/DISCUSSION: To reduce health disparities and promote better health outcomes, health care workers should strive to determine sexual orientation of the patients as a part of initial history taking in clinical practice, be alert to identifying the symptoms of depression in this group and offer timely and appropriate behavioral and pharmacological interventions. To reduce the prevalence of depression there is a need to change negative societal attitude towards sexual minorities through education, media & policy changes.

NOTES

A Qualitative Study of Food Insecurity in Hospitalized Pediatric Patients

King, Natalie, MD; Adolfo Molina, MD, MSHQS; Samantha Hanna, MD; Lori Brand Bateman, PhD, RD

INTRODUCTION: Food insecurity (FI) is defined as limited or uncertain access to enough food for a healthy and active lifestyle. The COVID-19 pandemic has impacted health, health care, and the economy-including increased unemployment and inflation. These disruptions have disproportionately affected low-income, food-insecure households, and placed greater stress on households with children. A primary reason cited for the increase in FI is the impact of the COVID-19 pandemic on employment leading to reduced food spending. Other reasons cited for increased FI during COVID-19 include self-isolation to avoid infection, food shortages and increased food costs. The COVID-19 pandemic has exacerbated physical and mental health challenges for those experiencing FI and/or with risk factors for FI. The objective is to explore how the COVID-19 pandemic has impacted the FI status of patients and their families through interviewing caregivers that screen positive for FI.

METHODS: Caregivers of all hospitalized patients at a tertiary children's hospital who screen positive for FI with a 2-question screening tool were approached for enrollment. Those who consented completed a pre-survey and participated in a semi-structured individual interview. Interviews were audio recorded, transcribed, and analyzed according to the guidelines of Thematic Analysis using NVivo 12.Key

RESULTS: Interviews were conducted with 15 caregivers between July 2021 and January 2022. Caregivers were 100% female and 80% Black, 13% White, and 7% Hispanic, with a mean age of 33. 73% did not experience FI until the COVID-19 pandemic. Themes include lost wages, mothers forced out of the workforce due to childcare limitations, inflation and shortages of goods, increased stress/anxiety for caregivers and children, the centrality of extended family support, and the necessity/inadequacy of federal food programs.

CONCLUSION: The COVID-19 pandemic has increased unemployment and poverty and consequently exacerbated FI. Solutions point to the need to focus on proximal societal solutions, such as federal policies aimed at food assistance and childcare. Understanding the challenges related to FI that caregivers and patients experience can improve screening, support, and treatment of patients presenting for care and inform the design of necessary interventions for individuals and communities.

ACKNOWLEDGEMENTS: COA nurses who facilitated FI screening and identification. Cynthia Deerman, COA head social worker for PHM who works diligently on FI screening, providing support, and addressing needs.

NOTES

Resilience Resources May Buffer Some Middle-Aged and Older Black Americans from Memory Decline Despite Experiencing Discrimination

McDonough, Ian, PhD; Byrd, DeAnnah, PhD; Choi, Shinae, PhD

INTRODUCTION: Experiences of discrimination have been associated with poorer episodic memory in Black Americans. However, resilience resources at multiple levels (individual, social, endowed) may act as a buffer to protect future memory decline, especially in the face of discrimination.

METHODS: Using longitudinal data from the 2006-2016 Health and Retirement Study (N = 1,862), we tested whether Black Americans aged 50 and older would show different trajectories of episodic memory depending on their reported discrimination (everyday and major lifetime) and resilience resources. Analyses were conducted in three steps: (1) joint latent cluster mixed modeling (JLCMM) to estimate the number of classes, (2) barycentric discriminant analyses (BADA) to model the combined influence of discrimination and resilience resources between each memory class, and (3) multinomial regression analyses to explore interactions between discrimination and resilience resources.

RESULTS: JLCMM resulted in three memory classes that differentiated baseline from longitudinal memory performance: "High Decliners," "Low Decliners," and "Low Stable." Two independent patterns described the relationships between the three classes in the context of discrimination and resilience resources. First, compared with High Decliners, the two lower baseline memory classes (Low Decliners and Low Stable) reported more everyday discrimination and lower individual and endowed resilience resources. Second, although the Low Stable class did not report different levels of discrimination, they had more social resilience resources (greater social support and more social contact) than both declining classes.

CONCLUSIONS: Black Americans in later life have heterogeneous patterns of memory trajectories as demonstrated by the three memory classes identified. Those with lower baseline memory experienced more everyday discrimination and had fewer resilience resources compared to the those with high baseline performance (High Decliners). Greater social resilience resources were associated with maintained episodic memory over time in Black Americans.

ACKNOWLEDGEMENTS: This work was supported by the Michigan Center for Contextual Factors in Alzheimer's Disease (P30AG059300-01). Foundation for the NIH, Grant/Award Number: P30AG031054; MIA, Grant/Award Number: NIA U01AG009740.

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Have We Accounted for Asians? A Disparity Analysis Amongst Pancreatic Neuroendocrine Tumor Patients

McElroy, Katherine, MD; Irfan, Ahmer, MD; Reddy, Sushanth, MD; Yates, Clayton, MD; Chen, Herbert, MD; Rose, J. Bart, MD

INTRODUCTION: Pancreatic neuroendocrine tumors (pNETs) are slow growing, malignant tumors that show different survival outcomes by race. They are often diagnosed in late stages, with few treatments available. PNETs are the second most common pancreatic cancer and are rapidly increasing in incidence. Current size-based guidelines were largely developed in White patients and recently have been called into question for Black patients. We investigated differences of primary tumor size (PTS) and incidence of lymph node metastasis between White and Asian pNET patients to evaluate generalizability of established guidelines.

METHODS: A multi-institutional analysis of patients with low grade, resected, nonfunctional, sporadic, non-metastatic pNETs was performed using the National Cancer Database. A Chi-squared test was utilized to determine correlation between PTS and incidence of LMN as well as patient racial group and incidence of LMN. A logistic regression model was utilized to determine correlation between LMN, PTS, and patient racial group. Overall survival was assessed using the Kaplan-Meier method.

RESULTS: A total of 4,977 pNET patients (205 Asian and 4772 White) were analyzed in the dataset. Both White and Asian patients had low incidence of lymph node metastasis (26.9% and 19.0%, respectively, $p < 0.05$). Within both populations, tumor size (<2cm, 2-3cm, and >3cm) positively correlated with incidence of LNM (11.5%, 24.6%, and 39.1%). No difference in LNM rate was noted between the two racial cohorts with $PTS \leq 3$ cm, however Asian patients are less likely to exhibit LMN at $PTS > 3$ cm (28.2% and 39.5%). Overall survival was not shown to be significantly different between Asian and White pNET populations ($p = 0.92$).

CONCLUSION: Current surveillance recommendation for pNET primary tumor size less than 2cm is based on data derived from primarily White patient populations but appears to be similar in Asian patients. Though overall risk of LMN was shown to increase with size, Asian pNET patients did not exhibit increased risk of LMN until $PTS > 3$ cm. Our findings suggest current size-based guidelines are accurate for Asians, but more research is needed in larger cohort.

ACKNOWLEDGEMENTS: NIH T32 Grant: T32 CA229102

NOTES

Relationship between food availability and habit strength of consumption in caregivers and children

McMillan, Katie; Worthington, Camille, PhD, RDN; Dutton, Gareth, PhD

INTRODUCTION: Early childhood is a critical period when diet preferences and patterns are developed, laying the foundation for future health. The home food environment (HFE) has the capacity to influence food intake and health behaviors. One mechanism by which home environment may influence dietary choices is through habit formation. However, few studies have examined whether the HFE is predictive of habit strength of health behaviors for both caregivers and their young children, particularly in low socioeconomic populations. This study examines the relationship between availability of fruits, vegetables, and SSB in the home and habit strength of consumption in caregivers and their young children from low income households.

METHODS: Baseline data for 145 caregiver-child dyads (children <5 years old; >50% Non-Hispanic, Black) enrolled in an existing home-based obesity prevention trial were included in this secondary analysis. A modified version of the Home Food Assessment (HFA)14 and Home-Inventory Describing Eating and Activity Development (Home-IDEA)15, 16 was used to capture the availability (sums) of total fruits, vegetables, and SSB in the home. The 4-item Self-Report Behavioral Automaticity Index (SRBAI) was used to assess caregiver and child automaticity of fruit, vegetable, and SSB consumption. Separate multiple linear regression models were used to regress habit strength of consumption for each food group on the availability of that food in the home while adjusting for relevant covariates.

RESULTS: Home vegetable and fruit availability was associated with higher caregiver habit strength of consumption for vegetables (unstandardized $r = 0.20$, $P < 0.05$) and fruit (unstandardized $b = 0.27$, $P < 0.01$), respectively. There was no association between SSB availability and caregiver SSB habit strength. Among children, greater availability of fruits and SSB in the home were associated with higher habit strength for consuming fruits (unstandardized $b = 0.19$, $P < 0.05$) and SSB (unstandardized $b = 0.34$, $P < 0.05$), respectively. No association was observed among children for vegetables.

CONCLUSIONS/DISCUSSION: Certain foods in the home environment were associated with automaticity of habitual dietary intake of those foods among caregivers and their young children. Prospective studies are needed to further characterize this relationship, as the HFE could be a potential intervention target for improving diet habits among caregivers and their young children.

ACKNOWLEDGEMENTS: Mentors include Dr. Camille Worthington and Dr. Gareth Dutton

NOTES

Associations between psychosocial stress, dietary intake, gut microbiota genera and alpha diversity among a young adult cohort of black and white women in Birmingham, Alabama

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BACKGROUND: The relationships between psychosocial stress and diet with gut microbiota composition and diversity deserve ongoing investigation. The primary aim of this study was to examine the associations of psychosocial stress measures and dietary variables with gut microbiota genera abundance and alpha diversity among young adult, black and white females. The secondary aim was to explore mediators of psychosocial stress and gut microbiota diversity and abundance.

METHODS: Data on 60 females who self-identified as African American (AA; n=29) or European American (EA; n=31) aged 21-45 years were included. Cortisol was measured in hair and saliva, and 16S analysis of stool samples were conducted. Discrimination experiences (recent and lifetime), perceived stress, and depression were evaluated based on validated instruments. Spearman correlations were performed to evaluate the influence of psychosocial stressors, cortisol measures, and dietary variables on gut microbiota genus abundance and alpha diversity measured by amplicon sequence variant (ASV) count. Mediation analyses assessed the mediating role of select dietary variables and cortisol measures on the associations between psychosocial stress, Alistipes and Blautia abundance, and ASV count.

RESULTS: AA females were found to have significantly lower ASV count and Blautia abundance. Results for the spearman correlations assessing the influence of psychosocial stress and dietary variables on gut microbiota abundance and ASV count were varied. Finally, diet nor cortisol was found to partially or fully mediate the associations between subjective stress measures, ASV count, and Alistipes and Blautia abundance.

CONCLUSION: In this cross-sectional study, AA females had lower alpha diversity and Blautia abundance compared to EA females. Some psychosocial stressors and dietary variables were found to be correlated with ASV count and few gut microbiota genera. Larger scale studies are needed to explore the relationships among psychosocial stress, diet and the gut microbiome.

KEYWORDS: psychosocial stress, diet quality, gut microbiota, young adults

NOTES

Live HealthSmart Alabama's Mobile Wellness Clinic: Results from the first year of implementation.

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INTRODUCTION: Alabama's health rankings in obesity, diabetes, cardiovascular disease, and stroke, are near the bottom of all US states. Access to treatment, and social determinants of health (SDoH) impede attempts to improve the health of vulnerable populations. Evidence suggests that mobile health clinics may be helpful in increasing access to health care, particularly for minority communities, improving individual health outcomes, and advancing population health.

METHODS: A descriptive analysis was conducted on data gathered from a retrospective evaluation of the Live HealthSmart Alabama Mobile Wellness Unit (LHSA-MW) records in Birmingham, Alabama. The LHSA-MW operated visiting sites in Birmingham's poorest areas during 2022. Individuals were tested for hypertension, diabetes, and hypercholesterolemia. Each participant was given counseling and information on the next stages in their treatment. Individuals who needed to be followed up on were enrolled in patient navigation services to help reduce their SDoH and obtain a primary care provider.

RESULTS: LHSA-MW serviced 1487 individuals, 60% females, average age 55.7+/-18.7 SD, and 62.5% were African Americans. 84.8% lacked health insurance, and 28.5% did not have a primary care provider. The health coverage gap was most significant in Hispanic or Latinos in which only 3.1% were insured vs 35.0% uninsured. 82% of participants had abnormal lab values, overweight and obesity prevalence was 28.4% and 47.7% respectively. 4.2% individuals had a newly suggested diagnosis of high blood pressure (12.1% uninsured vs 3.6% insured), 16% had HbA1C in pre-diabetic range and 5.9% diabetes (16.7% uninsured vs. 5.7% insured). Among participants with known diabetes 25.7% did not meet therapeutic target (42.1% uninsured vs 24.9% insured). The ASCVD 2013 10-year risk of heart attack or stroke score for the population was 9.6%+/-9.9SD, with 36.5% of the population having a risk score >10%. 70% of individuals required Lifestyle Modification (LSM) intervention and 10.5% primary care follow-up. 75% (n=94) of individuals that needed and accepted follow-up were navigated, referral was confirmed 26.4% of individuals. Healthcare barriers identified were transportation, finding a provider, and insurance status.

DISCUSSION: Improving disease control efforts for chronic diseases will require improved case findings to identify affected individuals at early stages and provide them with treatment and counseling to reduce morbidity. Participants seen by the LHSA-MW program had several characteristics associated with poor access to care. This research provides important information on the role of a mobile wellness program in addressing the health care needs of an underserved population at high risk for chronic diseases.

ACKNOWLEDGMENTS: We acknowledge the support of the University of Birmingham at Alabama funding, Live HealthSmart Alabama (LHSA) team efforts and LHSA community partners that made this community intervention program possible.

AFFILIATION: UAB Minority Health and Health Equity Research Center, Department of Medicine, Heersink School of Medicine, The University of Alabama at Birmingham, AL

There is no power for change greater than a community discovering what it cares about.

MARGARET J. WHEATLEY

Reducing Ethical and Social Prejudicial Effects of COVID-19 Testing in Underserved Populations (RESPECT-UP)

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BACKGROUND: Previously, we reported racial and socioeconomic disparities in COVID-19 case prevalence, testing rates, and test positivity in Alabama. In this study, we aimed to understand the social, ethical, and behavioral factors surrounding COVID-19 testing in highly vulnerable urban and rural African American communities in Alabama. We assessed social and structural barriers to COVID-19 testing while exploring stigma, discrimination, and behavioral factors that impact COVID-19 testing intentions in the context of vaccine availability

METHODS: The study population included African American residents of highly vulnerable (top 20% of the Social Vulnerability Index) neighborhoods in urban (Jefferson County) and rural (Dallas County) areas in Alabama. Using an explanatory sequential mixed methods design, we collected and analyzed quantitative (surveys) and qualitative (focus groups and key informant interviews) data to explore social, ethical, and behavioral factors surrounding COVID-19 testing. Here we report quantitative findings from survey data, which assessed social determinants, stigma, discrimination, and behavioral factors hypothesized to be associated with COVID-19 testing.

RESULT: A total of 301 participants completed the survey: n=240 (80%) urban, n=61 (20%) rural. The majority (74%) of participants were female, mean age 53.5 years. Multivariable linear regression and logistic regression models adjusted for age, sex, and rural/urban status revealed the following: (1) COVID-19 testing stigma is negatively associated with COVID-19 testing (and COVID-19 vaccination), both directly (OR 0.92, p<0.01) and indirectly through negative associations with efforts and plans to test (-0.04, p<0.05 for each). There was also a negative association between COVID-19 testing stigma and access to testing (-0.06, p<0.05). Individuals with low education and income report higher COVID-19 testing stigma (3.8, p<0.001 and 2.3, p<0.05, respectively). (2) COVID-19 stigmatizing attitudes (personal or community) are negatively associated with COVID-19 testing, both directly (OR 0.86, p<0.05) and indirectly through negative associations with norms (-0.18, p<0.05) as well as intention, efforts, and plans to test (-0.10, -0.07, and -0.09, p<0.05 for all). Individuals with low education and income report more COVID-19 stigmatizing attitudes (1.7, p<0.001 and 1.3, p<0.05, respectively), as do those not employed (1.5, p<0.01), whereas individuals with private insurance report less COVID-19 stigmatizing attitudes (-1.3, p<0.05). (3) COVID-19 discrimination (experienced or anticipated) is negatively associated with COVID-19 testing, indirectly through negative associations with attitudes (-1.6, p<0.01) as well as intention, efforts, and plans to test (-0.38, p<0.05; -0.34, p<0.01; and -0.46, p<0.05, respectively). It is also directly associated with lower odds of COVID-19 vaccination (OR 0.42, p<0.05). (4) Positive norms and attitudes regarding COVID-19 are associated with higher intention, effort, and plan to test (norms: 0.17, 0.14, 0.15, p<0.001 for all; attitudes: 0.14, 0.17, 0.16, p<0.001 for all). Those with children report worse COVID-19 norms and attitudes (-1.78, p<0.05 and -2.03, p<0.01, respectively). (5) Daily discrimination regardless of reason is negatively associated with effort and plan to test, both directly (-0.03, p<0.05 and -0.05, p<0.01, respectively) and through negative associations with COVID-19 norms, perceived control, and attitudes (-0.10, -0.05, and -0.12, p<0.05 for all). (6) Lifetime discrimination regardless of reason is negatively associated with norms and attitudes surrounding COVID-19 (-0.72 and -0.65, p<0.001 for both), with more educated participants reporting more lifetime discrimination (0.43, p<0.05). (7) Social determinants, such as being able to isolate without losing job and having a separate room to isolate, were associated with increased intention and effort to test, respectively (0.77, p<0.05 and 1.59, p<0.01, respectively).

CONCLUSION: A number of structural, social, and ethical factors impact COVID-19 testing and vaccination in vulnerable African American communities, both directly and through social cognitive factors (attitudes, norms, and perceived control) and behavioral intentions. These factors need to be addressed if we are to improve the equity, access, and uptake of current COVID-19 testing and be ready to deliver equitable, non-stigmatizing, and non-discriminatory testing in future outbreaks.

Cancer Survivors' Willingness to Conduct Virtual Assessments Among Potential AMPLIFI Study Participants

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INTRODUCTION: Social distancing during the Covid-19 pandemic forced researchers to identify alternatives to conduct study assessments usually conducted in person. Researchers had to ensure that safety measures were well provided to both study participants and the staff, with extra caution for the older population. One option for the AMPLIFI randomized clinical trial (RCT) for cancer survivors was to implement virtual study assessments using a videoconference platform. It was not known if potential participants would be willing to participate in such assessments, or if some participants would be less willing than others. We thus obtained cancer survivors' opinions on virtual visits by age, gender, race, education, and other characteristics.

METHODS: We conducted phone surveys with the AMPLIFI cancer survivors to assess their willingness to participate in virtual assessments (main outcome). We then used chi-square tests to test the significant differences in willingness to do virtual assessments by socio-demographic variables.

RESULTS: Among the 74 cancer survivors who agreed to answer the survey, 45 (57%) were breast cancer survivors, 60 (76%) were women, 28 (35.4%) were minorities, and 51 (64.5%) were white, 69.6% were aged between 50-69, 30.4% were over 70 years old, 65.4% of the survivors lived in rural or partially rural areas, 19% had lower education. Moreover, 66 (89.2%) were able to watch videos online, 73 (98.6%) owned a smartphone, computer, or tablet, and 66 (89.2%) had cameras on their devices. Overall, 62 (83.8%) were willing to participate in virtual assessment visits. Respondents aged 70+ were less likely (60.9%) to indicate a willingness to participate in virtual assessments than younger respondents (94.5%) (p = 0.004). Differences across other sociodemographic groups were not statistically significant.

CONCLUSIONS/DISCUSSION: IMPLEMENTING virtual assessments was acceptable for many cancer survivors participating in AMPLIFI, although less so for those in the oldest age groups. Researchers should consider these findings when implementing virtual assessments which, while implemented out of necessity during the pandemic, can be useful to reach participants who may be unable to travel for study assessments. Researchers, however, should continue to support older participants and help them overcome technological barriers by providing them with the needed support.

ACKNOWLEDGMENTS: The authors thank all the AMPLIFI staff including project managers, coordinators, assessors, recruiters, and others.

NOTES

Community Perceptions of Violent Crime and Solutions Emerging from a Community Engaged Planning Process: The Building a Better Bessemer Project

Tiffany Osborne, BA; Grace Okoro; Samantha Whitfield; Erin Carley; Yu-Mei Schoenberger-Godwin, PhD; Christson Adedeyoin, PhD; Lori Bateman, PhD

OBJECTIVES: With goals to improve health, increase quality of life, and reduce violent crime, Building a Better Bessemer: Innovations in Community-Based Crime Reduction is a holistic multi-sector project led by The National Organization of Black Law Enforcement Executives (NOBLE) and the University of Alabama at Birmingham (UAB). The current study is part of the community engaged planning phase and aimed to identify perceptions related to the prevalence of violent crime, crime contributors, the relationship between the community and law enforcement, and potential interventions and solutions.

METHODS: In March 2021, semi-structured interviews were conducted with individuals from 5 groups who resided or worked in Bessemer, Alabama: (1) Law Enforcement, (2) Residents, (3) Civic Leaders, (4) Community Leaders, and (5) Victims of Crime. Interviews lasted approximately 60 minutes and were audio recorded, transcribed, and analyzed according to the guidelines of Thematic Analysis using NVivo 12. We examined how emerging themes fit into the CDC Social-Ecological Model: A Framework for Prevention.

RESULTS: Participants (N=18) were 50.0% female and 77.8% African American with an age range of 25-59 (mean=43.4 years). Themes emerged related to crime: (1) impact, (2) contributors, and (3) solutions. At the individual level, impacts of crime focused on fear, and contributors of crime included youth under age 30, drugs, and money. Relationship level impacts included a lack of trust of law enforcement and neighbors, and for contributors, participants mentioned poor parenting and gangs. Community level impacts were decreased neighborhood social cohesion as well as decreased safety, and contributors included issues related to schools as well as a poor relationship with law enforcement. At the societal level, the poor reputation of the city was consistently highlighted, and for contributor's poverty was the overarching issue. Solutions that emerged included: education and training in life skills, youth programming, family/parenting and conflict resolution, and programs within schools, law enforcement, and economic opportunities. These findings will be merged with data from other sources to build an intervention plan.

CONCLUSIONS/DISCUSSION: Our multi-level Action Plan will implement programming that focuses on youth, in schools and housing communities as identified as hot spots, while also providing tangible support for those who are experiencing poverty.

ACKNOWLEDGEMENTS: The National Organization of Black Law Enforcement (NOBLE) received funds from the U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Assistance BJA : 2019-BJ-BX-0011, federal ORI number VA018ZZ "Innovations in Community-Based Crime Reduction - Bessemer"

NOTES

The Dialysis Experience

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INTRODUCTION: This study examines the lived experience of adults on dialysis in Alabama. African Americans are as much as 6X more likely than other populations to be on dialysis. Little is known about the experiences and processes of initiating dialysis, interacting with specialists, and making needed life changes as a result of the need for dialysis.

METHODS: Alabamians on dialysis were recruited through fliers posted in community settings such as churches and dialysis clinics and by word of mouth. Only those currently on dialysis were included in the study. Interviewees were asked 22 questions including demographics, their knowledge of dialysis, whether they had primary care providers and specialists and their interactions with them, their management of their disease, etc. Additionally, study participants completed a chronic kidney disease (CKD) Knowledge Questionnaire.

RESULTS: The sample included 58 adults currently on dialysis. The majority (83%) were African American with the remaining (10%) white and (4%) other. Four people did not disclose race. Few were still employed; some were retired and others were unable to work as a result of their health. Most had adequate general knowledge about kidney disease based on personal experiences. Data analysis revealed four large themes including: 1. Dialysis Knowledge and Management, 2. Dialysis Onset and Care, 3. Support and 4. Locus of health education and patient empowerment. Although most were aware of the types of dialysis, most chose to do dialysis at a clinic rather than at home. Most patients felt empowered to ask questions if they did not understand and mainly got their health information (print, video, and verbal) from dialysis staff and doctors but also used the internet for information; Most patients had good family or other support.

DISCUSSION/CONCLUSIONS: This study indicates the need for more preventive education and clinical care earlier in the kidney disease process including early engagement with primary care providers and nephrologists and inquiring about the possibility of dialysis.

NOTES

Is Time Everything: The Role of Time on the Relationship between Patient-Centered Communication and Provider Empathy in U.S. Health Care Organizations

Roscoe, Shanequa, MS; Silvera, Geoffrey PhD

INTRODUCTION: Limited health literacy has been identified as a significant cause of increased emergency room visits and hospitalizations, poor adherence to treatments, and poor health outcomes. Patient-centered communication has the potential to improve these outcomes. Several studies have indicated that providers that successfully implement patient-centered communication practices related to health literacy and exemplify higher levels of empathy improve patient health outcomes. A concern with implementing patient-centered communication that is frequently noted as a barrier is time. This study seeks to examine the role of time on the relationship between patient-centered communication and provider empathy.

METHODS: The 2019 Medical Expenditure Panel Survey-Household Component (MEPS-HC) was utilized to address this research question. This survey collects data from individual U.S. households about access to care, care satisfaction, and usage of medical services. Health literacy data is collected in the Self-Administered Questionnaire (SAQ), a supplemental survey. Respondents from both surveys were included in this study. Eligibility criteria included respondents that were 25 and older, had at least one visit to a doctor or other healthcare provider in the last 12 months, were provided specific instructions from a provider, and were required to fill out forms. A total of 6,459 respondents met these criteria (n=6,459). Structural Equation Modeling (SEM) was conducted using Stata with key variables controlling for patient and provider demographics.

RESULTS: Principal findings confirmed the direct relationship between patient-centered communication and provider empathy ($\beta=0.78$, $p<.05$). Patient-centered communication also had a positive relationship with time spent with providers ($\beta=0.55$, $p<.05$). Additionally, time spent with providers significantly predicted patients' perception of provider empathy ($\beta=0.77$, $p<.05$). The relationship between patient-centered communication and provider empathy is reduced but remains significant while controlling for time spent with providers (0.36, $p<.05$). The relationship between patient-centered communication and provider empathy is partially mediated by time spent with providers.

CONCLUSIONS/DISCUSSION: The findings suggest that patients are not only concerned with the amount of time spent with providers but also how that time is utilized by providers. This shows that the priority to provide patient-centered communication and for providers to be empathetic are not dependent only on spending more time with patients.

NOTES

Impact of neighborhood disadvantage on cognitive complaints in solid cancer survivors

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DISCLOSURES: None

BACKGROUND: Cognitive impairment is prevalent in up to 30% of solid tumor patients, negatively impacting independence and quality of life. The Area Deprivation Index (ADI), a composite measure of predominantly socioeconomic deprivation and the Social Vulnerability Index (SVI), which additionally measures household composition, minority status, and housing type, are widely used markers of neighborhood disadvantage. These measures are associated with poor health outcomes including poor cognitive function in dementia and Alzheimer's patients, however, associations in cancer survivors is uncertain.

METHODS: We included 1,275 solid tumor patients (71% gastrointestinal and 7.6% genitourinary) enrolled in the Cancer and Aging Resilience Evaluation (CARE) study. Cognitive complaints were captured using the PROMIS Short Form4a Cognitive Function survey, with a binary score cutoff of 11 used to indicate normal/mild vs moderate/severe cognitive impairment. Residential addresses, geocoded and joined to corresponding Census block group and tract, were used to match patients with their corresponding ADI and SVI scores. Multivariable logistic regression models were adjusted for known determinants of cognitive impairment including age, sex, and race, in addition to treatment phase, tumor stage and type, and clustering at the tract level.

RESULTS: Median age at study participation was 68yo (IQR: 64, 74), 60.3% were male, and 22% non-Hispanic Black. Patients in the top ADI quartile (top 25%) were more likely to report moderate to severe cognitive complaints compared to the lowest quartile (bottom 25%) (Adjusted OR (aOR) = 1.88, 95%CI: 1.06, 3.35, $p=0.031$). Top quartile of overall social vulnerability (v lowest) was also associated with higher complaints (aOR = 1.92, 95%CI: 1.04, 3.53, $p=0.036$) which seemed to be driven mainly by vulnerability related to minority status (aOR = 2.17, 95%CI: 1.27, 3.72, $p=0.005$).

CONCLUSION: Cancer survivors residing in areas with higher deprivation and higher indicators of social vulnerability are more likely to report moderate to severe cognitive complaints, especially after therapy. Given the significance of minority status, further research should explore other related aspects such as residential segregation. These findings highlight the overall need for dedicating appropriate resources and care planning to ensure survivors have improved functional outcomes.

Solving our region's biggest health challenges can only be achieved by innovative African-led solutions, which combin global and local frameworks.

RITGAK TILLEY-GYADO

The impact of social vulnerability on adherence to a colorectal enhanced recovery program

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FUNDING SOURCES: DIC supported in part by K12 HS023009 (2017-2019), K23 MD013903 (2019-2022), and R01 MD013858 (2020-2025). BPS supported in part by UAB Surgical Oncology T32 (T32 CA229102) and 2020-2022 ACS Resident Research Scholarship.

INTRODUCTION: Enhanced recovery programs (ERPs) improve outcomes but adherence to its individual components varies significantly. The contribution of social vulnerability to ERP adherence is unknown. Therefore, this study aimed to test the association of social vulnerability with ERP adherence.

METHODS: Retrospective cohort study of elective colorectal surgery patients under ERPs utilizing 2015-2022 ACS-NSQIP data. The CDC's social vulnerability index (SVI) was used to assess social vulnerability. The primary outcome was adherence to >70% of ERP components. Secondary outcomes were adherence to individual (N=16) ERP components. SVI was compared between adherent and non-adherent groups. Regression models tested for the association of SVI with primary and secondary outcomes.

RESULTS: Of 948 patients, 13.3% achieved >70% ERP adherence, 28% of patients had high (>0.66) SVI and 42% had low SVI (<0.33). There was no difference in >70% ERP adherence rates between high and low SVI groups (12vs.13%, p=0.7). Individual ERP component analyses revealed lower rates of early foley removal (40% vs.47%, p=0.02) and IV fluid cessation at 48 hours (35% vs.42%, p=0.04) among those with high SVI (compared to low SVI) despite no differences in ileus or nasogastric tube placement rates. On adjusted analyses, increasing SVI remained associated with reduced odds of early foley removal (OR0.42, 95%CI 0.21-0.82).

CONCLUSIONS: Social vulnerability impacts adherence to the ERP component of early foley removal. Future work is needed to understand mechanisms for this disparity and improve provider and patient awareness to ensure best practices in surgical care are applied to all.



Where you live should not determine whether you live, or whether you die.

BONO

The influence of caregiver depressive symptoms on the home food environment and food intake among caregiver-child dyads

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INTRODUCTION: Depression is a prevalent condition and has been associated with consuming a less healthful diet which may contribute to increased risk of obesity and cardiovascular disease observed with depression. Among caregivers of young children, depression may influence caregivers' food choices for their children and the types of foods available in the home. With home food environments having the capacity to drive health behaviors, studies are needed to understand factors, such as depression, influencing the home food environment. This study tested the hypothesis that caregiver depressive symptoms would predict the number of fruits, vegetables, fried foods, and sugar-sweetened beverages (SSB) present in the home.

METHODS: Baseline data from caregiver-child dyads (N=114) enrolled in an ongoing, home-based health promotion intervention were used for this secondary analysis. Caregivers completed a series of questionnaires that evaluated the home food environment and depressive symptoms. Separate stepwise linear regressions with relevant covariates were used to regress each home feature (e.g., number of fruits/vegetables, fried foods, SSB) on caregiver depressive symptoms.

RESULTS: Caregiver depressive symptom score was not a significant predictor of any features of the home food environment examined. However, associations between certain demographic factors and the home food environment were observed.

CONCLUSION/DISCUSSION: While caregiver depression was not associated with fruits, vegetables, fried foods, or SSB in families' homes, other potentially important factors predictive of the home food environment were observed. Future studies are needed to further understand risk factors for a less healthful home food environment, as this may be a relevant intervention target.

ACKNOWLEDGMENTS: Support for this project was provided by a grant from the National Institute on Minority Health and Health Disparities of the National Institutes of Health under award number U54MD000502 (Project 2; PIs: Dutton/Salvy). The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

NOTES

End The Epidemic: Examining The Health Equity Implications Of Health Systems, Policy, And Data Gaps For People Living With HIV (PLWHA) In the Southern U.S.

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INTRODUCTION: HIV diagnosis rates are not evenly distributed and significantly impact Black men and women residing in Georgia and Louisiana. Additionally, reporting in these specific states demonstrate late HIV diagnosis and a failure to link patients to care. In response to this alarming issue, the SHLI “End the Epidemic” initiative will address structural barriers in HIV care impacting Black communities in Atlanta, Georgia, New Orleans and Baton Rouge, Louisiana by implementing the following strategies:

- 1) Conduct asset mapping to examine the health systems gaps that prevent healthcare utilization for PLWHA. Train diverse healthcare professionals, learners and leaders, on the social/political determinants of health to develop sustainable and solutions-driven policies towards the achievement of health equity for PLWHA.
- 2) Assess jurisdictional policies which exacerbate/alleviate gaps in the HIV care continuum impacting PLWHA. Convene an HIV Equity Task Force to develop health equity strategies for retaining PLWHA.
- 3) Increase HIV data availability on the Health Equity Tracker to improve access to data for individuals and organizations. Provide technical assistance and policy assessments to jurisdictions concerning data practices, including tracking and measuring health inequities for PLWHA. Develop high-quality communications resources for community members, leaders, and influencers on HIV inequities.

METHODS: This initiative will apply a mixed methods approach to the data collection and analysis component of the project, as well as a process evaluation.

RESULTS: This novel approach will 1) Increase access and utilization of culturally competent healthcare to Black people impacted by the HIV epidemic 2) Gain insight into the disruption of the healthcare delivery system due to COVID-19 in the Black community and realign HIV service for PLWHA 3) Influence clinical provider training in HIV and 4) Initiate early engagement with experienced clinicians practicing in Black communities in the aforementioned cities.

DISCUSSION/CONCLUSION: Diverse healthcare professionals, learners and leaders will be trained to implement solution-oriented strategies to advance health equity for PLWHA. Also, this initiative will provide equitable data tracking of policies and resources to boost inclusivity, highlight at-risk populations, and alert users to existing inequities in health data impacting PLWHA.

ACKNOWLEDGEMENTS: Funding for this initiative is provided by Gilead Sciences, Inc.

NOTES

Work and Gender Disparities in Psychological Impacts of COVID-19 in the USA and Poland

Sweeney, Katie, MA; Szaflarski, Magdalena PhD

INTRODUCTION: People across the world experienced immense stress and psychological harm due to the COVID-19 global pandemic. Much of that stress was caused by extreme lifestyle changes, such as working or having children attend school from home, loss of jobs and income, and increased caregiving duties. Stress induced by COVID-19 looks different cross-nationally and based on social position. The USA and Poland are two countries that had vastly different COVID-19 trajectories early on. This study examines disparities in psychological impacts of COVID-19 among US and Polish adults in relation to work, gender, and family statuses.

METHODS: A cross-sectional survey of US and Polish adults (n = 571) was conducted online during June-July 2020. The dependent variable was a two-item measure of psychological decline due to COVID-19. Independent variables included work-related changes, gender, family status, and country-as a proxy for the sociocultural and epidemiological context of the pandemic. Nested regression analyses were conducted to estimate work, gender, family, and country effects on psychological impacts of COVID-19, controlling for pre-pandemic work status and income.

RESULTS: Work changes, female gender, and US-residence were associated (p<.05) with higher psychological impacts due to COVID-19, adjusting for other factors. However, the effect of work change was explained by country of residence, with more unfavorable work changes due to the pandemic (e.g., job loss) among US than Polish adults. No associations with family variables or interaction effects were observed.

DISCUSSION/CONCLUSION: Adults in Poland appear to be better protected because of less job loss and lower workloads early in the pandemic compared with US adults. Poland has a stronger welfare state and labor protections than the USA, which may have contributed to fewer changes in work situation and thus lower psychological impacts among adults. However, psychological impacts were higher among women than men in both countries, regardless of work, family, or income status, pointing to continuing vulnerability of women in men-dominated societies. The study’s main limitation is its convenience sample. Nationally representative data for these countries are needed to confirm and extend the findings from this study.

NOTES

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Poster 37

A Single Center Experience with Transitioning from Modifications of Diet and Renal Disease (MDRD) Formula to Chronic Kidney Disease-Epidemiology Collaboration (CKD-EPI) 2021 Formula

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INTRODUCTION: The use of race in the assessment of kidney function has been scrutinized in recent years, leading to the development of a new formula, Chronic Kidney Disease-Epidemiology Collaboration (CKD-EPI) 2021, removing the race variable from the estimated glomerular filtration rate (eGFR) equation, and is recommended for use by all the U.S. laboratories. We describe the effects of transitioning from the Modifications of Diet and Renal Disease (MDRD) formula to the CKD-EPI 2021.

METHODS: This retrospective cross-sectional analysis included individuals receiving care at the University of Alabama at Birmingham and who had at least one creatinine value available within the transition period of August 1, 2022 to September 30, 2022. Only the first observation per individual during the study period was included for analysis. Agreement between the two formulae for eGFR (ml/min/1.73m²) was examined both as a continuous variable and a categorical variable (4 categories: <15, 15-29, 30-59, and ≥60; 2 categories: <60 and ≥60).

RESULTS: A total of 44,625 individuals were included. Mean age was 55.4 years, 56.5% were female, 35.7% were (self-reported) black race, and 64.3% were non-blacks (59.7% white, 4.6% other). With CKD-EPI 2021, median eGFR was lower by 4 ml/min/1.73m² in black individuals (p<0.001) ; no significant difference was observed between females and males (-3 vs -4 ml/min/1.73m²). In contrast, eGFR was higher by 7 ml/min/1.73m² (p<0.001) in non-black individuals; no significant difference was observed between females and males (8 vs 7 ml/min/1.73m²). Overall, 41,757 (93.6%) remained in the same eGFR category (<60 or ≥60) while 795 (1.8%) switched (465 black female, 330 black male) from ≥60 to <60 category and 2,073 (4.7%) individuals (1,213 being non-black female, 860 non-black male) switched from <60 to ≥60 category. With the new formula, prevalence of CKD (eGFR <60) increased from 24.7% to 29.7% in blacks and decreased from 29.8% to 22.6% in non-blacks.

DISCUSSION: Overall, transition to CKD-EPI 2021 resulted in lower eGFR in black individuals and higher in non-blacks. This change in eGFR may impact clinical practice with changes in medication and/or medical procedure eligibility, CKD diagnosis, nephrology referral, and organ transplant eligibility.

NOTES

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Poster 38

Leveraging Community Partnerships: Georgia's Impact on Increasing COVID-19 Vaccine Confidence Through Community-Engaged Efforts

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INTRODUCTION: Achieving health equity through the elimination of health disparities is a core component of the HealthWorks Consortium (HealthWorks). In response to the disproportionate effects experienced across minority populations resulting from the COVID-19 pandemic, HealthWorks was established. HealthWorks' goal is to increase COVID-19 vaccine confidence and build organizational capacity in Georgia and Tennessee through targeted, culturally competent outreach and education, with an emphasis on communities of color. On the path to achieving health equity, HealthWorks sought to empower minority families, communities, and small businesses to become resilient in the face of health threats.

METHODS: Georgia's community engagement team is led by the Georgia Community Engagement Alliance Against COVID-19 Disparities (Georgia CEAL). For HealthWorks, Georgia CEAL used a three-prong approach to build confidence in COVID-19 vaccinations and create resilient communities. This approach offered three funding opportunities to engage, educate and empower community-based and community-serving organizations to become better prepared and resilient for the emergence of the next public health threat. Georgia CEAL conducted trainings on project deliverables and provided technical assistance. Deliverables for these opportunities included holding COVID-19 vaccination and education events, developing evidence-based educational materials, hosting forums and monthly reports.

RESULTS: Since February 2022, through HealthWorks, Georgia CEAL has administered 583 of 1,951 total COVID-19 vaccinations. Additionally, Georgia CEAL hosted 24 COVID-19 education events, developed 7,883 educational materials, produced 11 forums, and released three public service announcements reaching 5,611 individuals. These individuals represent 33 counties collectively served by the Georgia HealthWorks Team. Through these funding opportunities, the grantees reported building new partnerships with 41 organizations. When assessed, 75% of grantees indicated increased confidence in sharing COVID-19 information and hosting COVID-19-related events since becoming HealthWorks grantees.

DISCUSSION: To garner further insight into the confidence level of Georgians regarding COVID-19 vaccines and boosters, Georgia CEAL will administer a COVID-19 Vaccine Confidence Survey across the 33 counties reached through this project. The HealthWorks awarded organizations demonstrate how investments in minority communities contribute to improving preparedness, building resilience, and advancing health equity.

ACKNOWLEDGEMENTS: Financial support provided by the Community-Based Workforce to Build COVID-19 Vaccine Confidence Health Resources Services Administration (HRSA) Grant Award# 1 U3UHS45471-01-00.

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Associations between Affordable Care Act implementation and racial makeup of a high-risk breast cancer screening clinic

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INTRODUCTION: Though they are at higher risk for developing breast cancer compared to their White counterparts, Black women with breast cancer are less likely to receive routine screening mammograms. This disparity may stem from access barriers to screening services. It is unknown how Affordable Care Act (ACA) provisions eliminating cost sharing for women's preventive services may have impacted racial disparities in high-risk breast cancer screening.

METHODS: This retrospective, quasi-experimental study examined the impact of ACA implementation on the racial makeup of patients enrolled at a high-risk breast cancer screening clinic from 02/28/2003 to 02/28/2019. Patient demographic data (age, race, insurance status, and zip code to assess area-level socioeconomic deprivation) were abstracted from electronic medical records and descriptively compared pre- and post-ACA implementation. Interrupted time series (ITS) analysis using Poisson regression assessed monthly rates of clinic enrollment by race using incidence rate ratios (IRR) and 95% confidence intervals (CI). Models were adjusted for area-level deprivation as a proxy for socioeconomic status.

RESULTS: A total of 2,767 patients were enrolled in the clinic. On an average, patients were 46 years (SD, ±12) of age at enrollment, 82% were commercially insured, and 8% lived in a highly disadvantaged neighborhood. In adjusted ITS models accounting for trends over time, Black patients had a 15% decreased rate of enrollment post-ACA implementation (IRR 0.85, 95% CI 0.76-0.94). Enrollment for White patients showed no significant change over time (IRR 0.99, 95% CI 0.97-1.01).

CONCLUSIONS: While rates of enrollment did not change for White women, Black women at high risk for breast cancer had decreased rates of enrollment at a high-risk breast cancer screening clinic pre- vs. post-ACA implementation despite an ACA-enacted decrease in cost-sharing for women's health preventive services. Our results indicate a need for further research to identify factors contributing to known racial disparities in breast cancer screening.

ACKNOWLEDGEMENTS: This research was supported by the NIH NHLBI and the National Center for Advancing Translational Sciences of the NIH under award T35HL007473 and award number UL1R003096, respectively. The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH.

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Association of Human Papillomavirus (HPV) and Health Literacy Among Women in Alabama

Chelsea Malia Tucker, MS; Larrell Wilkinson, PhD

INTRODUCTION: HPV is one of the most common sexually transmitted viruses in the USA. According to the Centers for Disease Control and Protection (2022), more than 42 million Americans are currently infected with HPV types that cause disease. Given the effectiveness of the HPV vaccine, over 90% of cancers caused by the virus can be prevented (CDC, 2023). Modifiable risk factors for consequences due to HPV include accessibility to vaccination and early engagement with healthcare providers (CDC, 2023). In addition, health literacy may be critical due to the lack of health literacy skills and willingness to get a provider-recommended HPV vaccine among newly eligible US adults. This study examines the association between HPV vaccine uptake and health literacy among adult women in Alabama.

METHODS: Using data from the 2016 Behavioral Risk Factor Surveillance System (BFRSS), we analyzed the results of 4,225 women from the state of Alabama aged 18 or older. The independent association between health literacy and human papillomavirus (HPV) vaccine uptake is examined.

RESULTS: Among the participants, 62.8% reported HPV vaccine uptake, and 48.9% reported vaccine completion. Using a less conventional but often practical alpha level of 0.10 for small sample sizes, evidence suggests differences in vaccine uptake by race (NHW, NHB, Other) $p = 0.095$ and vaccine completion ($p = 0.099$). Among women receiving the HPV vaccine and completing the vaccine regimen, only 8.4% reported difficulty in getting or not looking for advice about health topics; 7.6% reported difficulty understanding information from medical professionals; and 12% reported difficulty understanding written health information. No differences in proportions were observed by race for health literacy measures. However, the proportions of difficulty regarding all health literacy varied significantly by educational attainment ($p < 0.0001$).

CONCLUSIONS: Results underscore the differences that exist by race regarding vaccine uptake and completion. Differences in vaccine uptake and vaccine completion by race/ethnicity may be explained by other factors besides health literacy, necessitating additional research. Findings underscore the importance the K-12 educational system and college education have in fostering health literacy among adult women in Alabama. Furthermore, health literacy is vital to achieving health equity goals (CDC, 2022), focusing on facilitating personal decision-making among women and organizational changes among health care providers.

NOTES

The Eating and Exercise Habits of African American Youth Living in Rural Alabama

Amanda Williams; Sharlene D. Newman

INTRODUCTION: Rising obesity rates in children have become a national concern, with the highest rates prevailing in rural communities. The objective of this study is to evaluate the eating habits, exercise levels, and food access of children living in rural Alabama.

METHODS: Parents and children in four communities across the Alabama Black Belt completed a survey evaluating distance to grocery stores, frequency of homecooked meals, and their child's exercise levels, health, and consumption of water, fruits, vegetables, and unhealthy foods including processed meats. Then, the survey was adapted to include knowledge on food groups and health consequences from unhealthy eating and administered directly to the children in those communities.

RESULTS: Analysis of the parent survey revealed the children's diets are lacking in nutrients. On average, the parents thought their children consumed four vegetables and four fruits per week despite the recommendation of fourteen. Very few parents indicated that their child had been diagnosed with high blood pressure or Type II Diabetes. Additionally, roughly fifteen percent of parents indicated that their child was overweight, and of those only half had been advised by a healthcare provider to lose weight. On average, children play outside twice a week. Analysis of the child survey data showed similar results to the parent survey. The children indicated that they consume the following three times a week or more: ramen noodles, processed meats, fruits, and vegetables. Additionally, they indicated that they drink four glasses of water every day.

DISCUSSION/CONCLUSION: Despite both the parent survey and child survey indicating that the children have poor diets, we did not find an alarming obesity rate, which does not match current literature. Future studies should explore this difference, analyze future health implications resulting from poor nutrition, and identify meaningful ways to improve exercise levels and balance their diets to work towards reducing childhood obesity rates and improve overall health in rural communities.

ACKNOWLEDGEMENTS: This work was supported by a grant from the U.S. Department of Health and Human Services (# CPIMP211265) awarded to the Town of Fort Deposit. We would like to thank Kimberly Moss, Melonie Pichon, Deborah Scott, Kileema Rogers, and Angela Orr for their support in collecting the data.

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Racial Disparity in Autopsy Performance before and during the COVID-19 Pandemic.

Williams, Michael, MD, MSc; Richardson, Thurman, PA; Davis, Ronnie; Benson, Paul, MD

INTRODUCTION/BACKGROUND: The COVID-19 pandemic has showed persisting disparities in COVID cases and COVID deaths of people of color compared to Whites. COVID-19 has exacerbated inequalities in the United States. Autopsies were necessary to determine the pathology of COVID-19 infection.

METHODS/DESIGN: The University of Alabama at Birmingham (UAB) autopsy service performed 87 COVID-19 related autopsies on UAB decedents from March 31, 2020 to March 30, 2022. We collected demographic data for the autopsied cases for the same time period. To determine how much COVID-19 affected the data, the authors collected the same data of pre-pandemic autopsies that occurred from 2017-2020.

RESULTS: Eighty-seven UAB COVID-19 autopsies were conducted from March 31, 2020 to March 30, 2022. Fifty-eight Blacks made up 67% of the total COVID-19 autopsies, twenty-six Whites made up 30% of the total COVID-19 autopsies and three Hispanics made up 3% of the total COVID-19 autopsies. There were 30 Black males, 28 Black females, 18 White males, 8 White females, 3 Hispanic males and 0 Hispanic females. Pre-pandemic data was evaluated and compared to pandemic data. The data was compared between races to evaluate for disparities in COVID-19 autopsies. No significant difference in autopsy numbers between Blacks and Whites was detected overall for all UAB autopsies from 2017-2022. During 2021, Blacks had a significantly increased number of COVID-19 autopsies (n=34) than Whites (n=10) and Hispanics (n=3).

CONCLUSION: Review of all UAB autopsies from before COVID-19 and during the COVID-19 pandemic showed no overall difference between races. A significant disparity was discovered in COVID-19 autopsies performed during 2021 with Blacks having significantly higher COVID-19 autopsies (n=34) compared to Whites (n=10) and Hispanics (n=3).

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EXCELLENCE IN MENTORING AWARDS

Meet the Mentor:

Pariya Wheeler, PhD

Associate Professor of Nursing
University of Alabama at Birmingham
Associate Professor, Nursing Family, Community & Health Systems , Nursing Academic Affairs



“Mentoring can make or break a student’s success. I am a product of excellent mentoring and am committed to paying it forward. Unfortunately I have witnessed students who have not met their potential due to sub par mentoring. Mentoring has many forms, but the essence is providing the trainee with the resources and support to succeed. When my students and trainees succeed, I succeed. I would not be where I am today without excellent mentors, as well as excellent mentees who play such an integral role in the success of my research program.”

A Word From the Nominator

"I nominated my mentor Dr. Pariya Fazelli-Wheeler because I believe that her research is significant, especially in this day and age. Over the summer, I participated in her NeuroCOVID study, which is very relevant. In addition to her important research, Dr. Wheeler is very personable. I greatly enjoyed our Wednesday morning meetings where we shared, not only progress, but also laughs."

Mayah Seal

Undergraduate student, Oakwood University
Research in Aging through Mentorship and Practice - Undergraduate Program (UAB RAMP-UP 2022-24)

Meet the Mentor:

Nabiha Yusuf, PhD. MSPH

Professor, Dermatology, Heersink School of Medicine
Professor, Epidemiology, School of Public Health



"I think mentoring is important as it provides emotional and career support to the mentee to become successful. It has to be tailored to the needs of the mentee."

A Word From the Nominator

"Dr. Nabiha Yusuf and I met after she gave a presentation on her research project of how UV light affects skin. I was interested in her research, approached and introduced myself to Dr. Yusuf. She encouraged me to come by her office to talk about joining one of her research projects. Since meeting her, she has shown genuine interest in my success as a medical student and researcher.

When I met with Dr. Yusuf to discuss summer research opportunities, she encouraged me to apply to SCREP. I explained to her that it was important that I have flexibility in being able to do research remotely in order to spend time with my daughter. She was very understanding and adjusted when I needed to come into the lab and stated that she wants me to be successful. I greatly appreciate Dr. Yusuf and her team's patience with my little research experience. They have been helpful in teaching me different laboratory techniques and encouraging me to write review articles for possible publication. So far, I have learned a great deal and hope to continue having Dr. Yusuf as my research mentor. "

Brittany Isaac

University of Alabama at Birmingham MD/MBA Candidate 2025
Summer Cancer Research Education Program (SCREP 2022)

Meet the Mentor:

Karlene Ball PhD

University Professor

University of Alabama at Birmingham

Professor, Ophthalmology, School of Medicine

Professor, Neurobiology, Academic Joint Departments

University Professor, Psychology, College of Arts and Sciences



"Mentoring is one of the most enjoyable and important things that I do. Helping others in all stages of their training and subsequent careers, and celebrating their successes with them, as well as talking through barriers and disappointments, is why I love my own position so much. It is truly an honor to be a mentor."

A Word From the Nominator

"Dr. Ball began mentoring me when I participated in the HDREP training program. She always engages with her mentees and goes beyond her responsibilities to help and guide us. She is very patient and supportive, and wants her mentees to succeed in their careers. In addition, Dr. Ball served as my mentor for the RCMAR Pilot Grant Award 2021, and was a co-investigator on the project, which we have successfully completed. She was always there if I needed any suggestions during the project implementation. Dr. Ball is now working with me to develop manuscripts and NIH grant applications based on the RCMAR pilot grant, and continues to provide her valuable guidance as I go through the process of tenure and promotion, and build my own independent research. Dr. Ball is a great mentor, and I look forward to maintaining this relationship into the future."

Roohi Andrabi, PhD, MSN, BSN

Assistant Professor, The University of Alabama

UAB Health Disparities Research Education Program (HDREP 2020-21)

The UAB Minority Health & Health Equity Research Center (MHERC), established in 2002, generates and disseminates research knowledge from biomedical, behavioral, and social sciences in order to reduce the health disparities experienced by vulnerable populations and disadvantaged communities locally, regionally, and nationally. By aligning research, training and community outreach, the MHERC advances scientific knowledge about the root causes of health inequalities and delivers real-world solutions to vulnerable communities. The MHERC is a University-wide Interdisciplinary Research Center and a designated Center of Excellence in Health Disparities Research by the National Institute on Minority Health and Health Disparities (NIMHD) at the National Institutes of Health (NIH).

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