



13th ANNUAL

HEALTH DISPARITIES RESEARCH SYMPOSIUM

SOCIAL DETERMINANTS FROM THE GLOBAL PERSPECTIVE

Monday, March 19, 2018



Birmingham, AL





MID-SOUTH TRANSDISCIPLINARY
COLLABORATIVE CENTER FOR
HEALTH DISPARITIES RESEARCH



UVB MINORITY HEALTH & HEALTH DISPARITIES RESEARCH CENTER



UAB MINORITY HEALTH AND HEALTH DISPARITIES RESEARCH CENTER



Dear Symposium Guests,

With great pleasure we welcome you to the 13th Annual UAB Health Disparities Research Symposium.

The symposium highlights research in health disparities 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 and Health Disparities Research Center (MHRC), 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, we are pleased to welcome our plenary speakers, who come from the United Kingdom to share valuable insights about social determinants from a global perspective. **Judy Kurth** is the Director of the Centre for Health and Development (CHAD). **Christopher Gidlow, PhD**, Associate Professor, Faculty of Health Sciences, Staffordshire University is the Academic Director for CHAD. **Aliko Ahmed, MBBS, MSc, MSt**, serves as the Director of Public Health England for East of England, a Senior Fellow both at Chatham House Centre on Global Health Security and the Institute of Public Health, University of Cambridge.

The symposium is co-sponsored by two national transdisciplinary collaborative centers (TCCs) for health disparities research: the Gulf States Health Policy Center, whose work is to improve health rankings of the Gulf States region and the Mid-South TCC, whose focus is investigating the social determinants of health disparities in obesity and related chronic diseases in six mid-south states.

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!

We 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,

Mona N. Fouad, MD, MPH
Senior Associate Dean for Diversity and Inclusion
UAB School of Medicine
Director and Professor, Division of Preventive Medicine
Director, UAB Minority Health &
Disparities Research Center
PI, Mid-South Transdisciplinary Collaborative Center

Regina Benjamin, MD, MBA
Founder and CEO, BayouClinic
18th U.S. Surgeon General
NOLA.com/Times Picayune Endowed Chair of
Public Health Sciences at
Xavier University of Louisiana
PI, Gulf States Health Policy Center

PLENARY SPEAKER



Judy Kurth

Director, Centre for Health and Development
Staffordshire University, United Kingdom

Ms. Kurth is an experienced Public Health strategic manager with roles which have spanned local government and National Health Service (NHS) over the past 25 years. Her areas of interest are health and social inequalities and community development for health.

As a Public Health Improvement practitioner and commissioner, Ms. Kurth had responsibility for developing and commissioning interventions in the areas of public mental health, substance misuse services, community safety, health literacy, healthy environments, social action for health and age-friendly communities. During this

time, she also led on the commissioning of two major research projects in the areas of health literacy and mental wellbeing which continue to underpin much of the local work in these areas today. She was also the World Health Organization (WHO) European Healthy Cities (EHC) Coordinator for Stoke-on-Trent and an elected member to the WHO EHC Advisory Board.

Since 2016 Ms. Kurth has been the Director of the Centre for Health and Development (CHAD), a translational research centre that undertakes a range of research and evaluation activities that contribute to improving health and reducing health inequalities. Drawing on her experience as a public health practitioner, and informed by her commitment to community-led public health, CHAD has been established as a partnership between academia, practitioners and community which provides a solid basis for addressing the social determinants of health and reducing health inequalities

Ms. Kurth is currently undertaking a professional doctorate in public health, with a focus on the social determinants of health inequity.



Christopher Gidlow, PhD

Academic Director, Centre for Health and Development
Associate Professor, Staffordshire University, United Kingdom

Dr. Gidlow is an applied health researcher whose interests span a range of areas, including physical activity promotion in primary care and the community, the role of neighborhood environments in influencing health and behavior, links between environment, stress and health, and primary prevention programme for cardiovascular disease.

Over the past 11 years, Dr. Gidlow has led a range of projects in these areas, from epidemiological studies to experimental studies and randomised controlled trials, and has become specialised in two main areas: natural environments and

health, and primary CVD prevention (NHS Health Checks - the national CVD risk identification and management programme in England). His work in green space promotion culminated in being the UK lead for the PHENOTYPE project: a four-year European project that used a range of innovative methods to improve our understanding of the relationship between natural environment and our health. He remains a member of the GoGREEN EX consortium, a group of academics who seek to develop interventions exploit the potential therapeutic and preventive benefits of natural environment engagement. In CVD prevention, Dr. Gidlow has led projects that have aimed to understand patterns of, and reasons for, poor uptake to CVD risk identification and management programmes, and to develop novel invitation approaches to improve uptake. He currently leads a National Institute for Health Research-funded study of how novel risk calculators might improve CVD risk and communication in health checks to improve their effectiveness.

Since 2016, Dr. Gidlow has been the Academic Director for the Centre of Health and Development (CHAD), a translational research centre that undertakes a range of research and evaluation activities with the common remit of improving health and reducing health inequalities.

PLENARY SPEAKER



Aliko Ahmed, MBBS, MSc, MSt

Director of Public Health England for East of England
Senior Fellow, Chatham House - Centre on Global Health Security
Senior Fellow, Institute of Public Health, University of Cambridge
Professor in Public Health, Staffordshire University
Founding Member, Centre for Health and Development, United Kingdom

Professor Aliko Ahmed is Director of Public Health England for East of England, and previously the Director of Public Health for Staffordshire National Health System (NHS) and County Council. During his time in Staffordshire, he helped to establish the Centre for Health and Development (CHAD). Currently, he oversees the development and implementation of Public Health England programs and activities in the East of

England including the provision of technical advice and support to local governments and the NHS.

His earlier global health experiences include extensive field work in infectious diseases and outbreak as a medical epidemiologist with Médecins Sans Frontières (Doctors Without Borders), advising and supporting national disease control programs in Africa, and a key role in a large global program that supported governments in low income countries to develop national mental health policies. He maintains a special interest in collaborative efforts towards sustainable health system solutions in Africa.

MODERATOR



Rubin Pillay, MD, PHD, MBA, MSc

Professor of Medicine, Healthcare Innovation
Assistant Dean for Global Health Innovation, School of Medicine
Chief Innovation Officer, UAB Health System
University of Alabama at Birmingham

Rubin Pillay is a high performance, versatile and commercially astute healthcare executive offering a twenty-eight-year career of impressive successes in healthcare a clinician, academic, leader and innovator/entrepreneur.

medical futurist and Professor of Healthcare Innovation, he is currently the Assistant Dean for Global Health Innovation at the School of Medicine, and the Chief Innovation Officer of the Health System at the University of Alabama in Birmingham. Dr. Pillay is

a Family Physician and Clinical Pharmacologist who holds a PhD in Business Administration, an MBA and an MSc in Health Management.



The Centre for Health and Development (CHAD) is an innovative partnership between Stoke-on-Trent City Council, Staffordshire County Council and Staffordshire University. Its purpose is to contribute to the reduction of social and health inequalities and improve the health and wellbeing of our local population through carrying out high quality translational and internationally recognized research. The CHAD partnership, bringing together local government, academia and local communities, has been endorsed by Sir Michael Marmot as being 'exactly what is needed' to tackle health inequalities and address the social determinants of health.

Monday, March 19, 2018

Event Time	Topic	Room Location
8:30 – 10:30 AM	Registration and Breakfast Buffet	<i>Lobby</i>
POSTER SESSION		
9:00 – 10:30 AM	Poster Session: Review Research Posters and Discuss with Presenters	<i>Heritage II</i>
OPENING REMARKS		
10:40 – 10:45 AM	<p>Mona Fouad, MD, MPH Senior Associate Dean for Diversity and Inclusion, UAB School of Medicine Director and Professor, Division of Preventive Medicine Director, UAB Minority Health & Health Disparities Research Center</p> <p>Regina Benjamin, MD, MBA Founder and CEO, BayouClinic 18th U. S. Surgeon General</p>	<i>Heritage I</i>
PLENARY SESSION		
10:45 – 11:45 AM	<p>Judy Kurth Director, Center for Health and Development, UK <i>Social Determinants of Health and the Experience of a Small Research Institute in Staffordshire, UK</i></p> <p>Chris Gidlow, PhD Academic Director, Centre for Health and Development, UK <i>Natural Environments, Health, and Health Inequalities</i></p> <p>Aliko Ahmed, MBBS, MSc, MSt, Director, Public Health England for East of England, UK <i>Africa and Health Inequalities – An Asset-Based Approach to Sustainable Improvements</i></p>	<i>Heritage I</i>
LUNCH		
12:00 PM	LUNCH BUFFET OPENS	<i>Heritage I</i>
PANEL DISCUSSION		
1:00 – 2:00 PM	<p>Social Determinants & Health Disparities: What Can We Learn From Each Other?</p> <p>Moderator: Rubin Pillay, MD, PhD Professor of Medicine, Healthcare Innovation Assistant Dean for Global Health Innovation, School of Medicine Chief Innovation Officer, UAB Health System University of Alabama at Birmingham</p>	<i>Heritage I</i>
MENTORING AWARDS		
2:00 – 2:15 PM	UAB Minority Health & Health Disparities Mentoring Awards	<i>Heritage I</i>
BREAKOUT SESSION		
2:30 – 4:00 PM	<p>Community Engaged Research and Intervention Moderator: Tiffany Carson, PhD, MPH Assistant Professor, UAB School of Medicine, Preventive Medicine</p>	<i>Heritage I</i>
1	Yu-Mei Schoenberger, PhD, MPH Assistant Professor, UAB School of Medicine, Preventive Medicine	Using Descriptive Findings from a Survey Jointly Administered by an Academic-Community Health Coalition to Plan Future Health Interventions
2	Craig M. Wilson, MD Professor, UAB School of Public Health, Epidemiology, Pediatrics, and Microbiology	Impacting the HIV Continuum of Care for Domestic Youth through Community Coalition Driven Structural Change Objectives

Monday, March 19, 2018

Event Time	Topic	Room Location
3	Edward Peters, DMD, ScD, MS Professor & Chair, Epidemiology LSU School of Public Health	Feasibility of Using a Smartphone-Based Mindfulness Meditation App to Increase Mindfulness in a Population of Women
4	Henry Nuss, PhD Assistant Professor, LSU School of Public Health	Preschool Policies on Free Play and Screen-Time: Associations with Children's Physical Activity and Out-Of-School Screen-Time
2:30 – 4:00 PM	Social and Behavioral Determinants of Health Moderator: Michael Twa, OD, PhD, FFAO Director, Vision Science Graduate Program Associate Dean for Research and Graduate Studies	Centennial I
1	Olivio Clay, PhD Associate Professor, College of Arts & Sciences, Psychology	Associations of Social Determinants and Medical Conditions with Health-related Quality of Life among Older African American Men
2	Gabriela Oates, PhD Assistant Professor, UAB School of Medicine, Department of Pediatrics	Social Risk Factors and Medication Adherence in Chronic Diseases: Findings from the REGARDS Study
3	Trisha M. Parekh, DO Instructor, UAB School of Medicine, Internal Medicine	Determinants of Smoking Cessation in a National Cohort of Black and White Adults: The Reasons for Geographic and Racial Differences in Stroke
4	Irena Stepanikova, PhD Associate Professor, UAB College of Arts & Sciences, Sociology	Maternal Stress Contributes to Childhood Infectious Diseases: Evidence from the Czech Republic
2:30 – 4:00 PM	Race and Ethnicity Related Disparities Moderator: Rob Weech-Maldonado, PhD, MBA Professor and L.R. Jordan Endowed Chair, UAB School of Health Professions, Health Services Administration	Centennial II
1	Dione King, PhD Assistant Professor, UAB College of Arts & Sciences, Social Work	Preconception health literacy and infant mortality disparities: Improving minority health knowledge through a community-based approach
2	Eleanor M. Hall, PhD, RN, MSN Associate Professor, Thomas University School of Nursing	Social Ecology of Adherence to Hypertension Treatment in Latino Migrant and Seasonal Farmworkers
3	Christine Campbell, MD Assistant Professor, UAB School of Medicine, Pediatric Emergency Medicine	Evaluating Triage Bias In a Pediatric Emergency Room
4	Magdalena Szflarski, PhD Associate Professor, College of Arts & Sciences, Sociology	Discrimination Effects on Immigrant and Refugee Health and Well-being
2:30 – 4:00 PM	Nutrition and Obesity Disparities Moderator: Stephen Barnes, PhD Professor of Pharmacology and Toxicology Director, Targeted Metabolomics and Proteomics Laboratory	University
1	Monica Baskin, PhD Professor, UAB School of Medicine, Preventive Medicine	Preliminary Outcomes from the Pregnancy and Early Life in the South (PEARLS) Study
2	Susan Andreae, PhD, MPH Instructor, UAB School of Medicine, Preventive Medicine	Assessing Youth Perceptions and Awareness of Diabetes in Rural Alabama
3	Anne Gaglioti, MD Associate Professor, Morehouse School of Medicine	Individual and Ecologic Impacts on the Relationship between Waist Circumference and Coronary Heart Disease in Racial/Gender Subgroups in the REGARDS Study

Monday, March 19, 2018

Event Time	Topic	Room Location
4	Laura Dreer, PhD Associate Professor, UAB School of Medicine, Ophthalmology	Examination of Problem Weight and Social Determinants Among People with Vision Impairments: Implications for the Development of a Tailored, Weight Management Behavioral Health Program
2:20 – 4:00 PM	Geographic Disparities Moderator: Wendy Demark-Wahnefried, PhD, RD Professor and Webb Endowed Chair of Nutrition Sciences Associate Director, UAB Comprehensive Cancer Center	Arlington
1	Jennifer Scott, DrPH Assistant Professor, LSU Social Work	Alcohol outlets as an indicator of the health risks of segregation
2	Bisakha Sen, PhD Professor, UAB School of Public Health, Health Care Organization and Policy	How Did The Patient Protection & Affordable Care Act Impact Health Disparities Within the Gulf States, and Between Gulf States and Rest of the Nation?
3	Rhiannon D. Reed, MPH Researcher, UAB School of Medicine, Department of Surgery	Geographic Disparities in Rates of End-Stage Renal Disease and Organ Supply in Gulf States Compared to Non-Gulf States
4	Hosik Min, PhD Associate Professor, University of South Alabama, College of Arts & Humanities, Sociology, Anthropology, and Social Work	Patterns and Trends of Health Insurance Coverage on Gulf States by Rural/Urban Areas after Affordable Healthcare Act

Event Time	Topic	Room Location
4:00 – 5:00 PM	PHOTO CALL – MHRC Training Alumni, Mid-South & Gulf States Health Policy Teams RESEARCH MINUTE – Record a 1 minute video about your work	Lobby

Social Determinants from the Global Perspective



Abstracts

13th Annual UAB Health Disparities Research Symposium

Monday, March 19, 2018

Birmingham, Alabama

ABSTRACTS

13th Annual UAB Health Disparities Research Symposium 2018
 March 19, 2018

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Ainsworth, Matthew C., MPH**Poster 1****UAB School of Public Health, Department of Health Behavior****Physical Activity And Related Psychosocial Outcomes From A Pilot Randomized Trial Of An Interactive Voice Response System-Supported Intervention In The Deep South**

Ainsworth, Matthew C., MPH; Pekmezi, Dori, PhD; Holly, Taylor, MPH; Williams, Victoria, MPH; Joseph, Rodney, PhD; Wang, Kaiying, BS; Rogers, Laura, MD; Marcus, Bess, PhD; Desmond, Renee, PhD; Demark-Wahnefried, Wendy, PhD

PURPOSE: Physical activity exerts cancer-protective effects, yet most Americans are inactive, especially in the South, where cancer incidence rates are generally higher. Telephone-based approaches can help overcome physical activity intervention barriers in this region (literacy, costs, lack of transportation/technology, and distance from facilities) and can be automated via Interactive Voice Response (IVR) systems for improved reach and cost-effectiveness. The current study aimed to evaluate the Deep South IVR-supported Active Lifestyle (DIAL) intervention.

METHODS: A pilot randomized controlled trial was conducted among 63 underactive, mostly obese adults in Birmingham, AL in 2015-2017. Results: Retention was 88.9% at 12 weeks and >75% adherence (IVR contact on at least 63-out-of-84 days) was noted among 62.5% of intervention participants. Intervention participants reported larger increases in self-reported moderate-to-vigorous intensity physical activity from baseline to 12 weeks than the waitlist control arm (median change = 47.5 vs. 5.0, respectively, $p=0.09$). Moreover, the intervention produced significantly greater increases in physical activity self-regulation ($p < .001$) and social support from family ($p = .001$) and friends ($p = .009$) from baseline to 12 weeks, compared to the waitlist control. Significant decreases in sleep disturbance were also found in the intervention arm but not among the controls, $p < 0.05$. Overall, intervention participants reported being satisfied with the DIAL program (71.4%) and would recommend it to friends (92.9%).

DISCUSSION: Findings support the feasibility, acceptability, and preliminary efficacy of the DIAL intervention.

CONCLUSION: Next steps include intervention refinement in preparation for a fully-powered efficacy trial and eventual dissemination to rural counties.

Andreae, Susan, PhD, MPH**University****UAB School of Medicine, Preventive Medicine****Assessing Youth Perceptions and Awareness of Diabetes in Rural Alabama**

INTRODUCTION: Diabetes management programs that engage all family members may be a promising strategy to reduce the risk of diabetes in future generations. The goal of this study was to explore youth's awareness and understanding of diabetes.

METHODS: Focus groups were conducted with African-American youth aged 8-11, living in rural Alabama, who had an immediate family member with diabetes, and were reported to be sedentary and overweight by their caretaker. Transcripts were analyzed by two coders using open coding.

RESULTS: Participants ($n=15$) were 53% female with a mean age of 9.5 ($SD\pm 1.1$). 60% were physically active 1-2 days or less per week. Most participants reported multiple family members with diabetes. While some youth were aware of the health complications caused by diabetes, most participants reported a peripheral understanding within the context of management behaviors (i.e., not being able to eat sugar) rather than disease processes. Participants were unaware of how one developed diabetes or ways to reduce diabetes risk factors. Although all participants were aware of diabetes, participants reported that they had never spoken directly to their parents or other adults about diabetes. Rather, they reported that they learned about diabetes through watching family members manage the disease. Finally, participants expressed a desire to learn more and to encourage and help family members to manage their diabetes.

DISCUSSION: Findings demonstrate that youth have an awareness and a peripheral understanding of diabetes without explicit education about diabetes. Furthermore, diabetes education programs that engage the entire family may be feasible and acceptable to the youth. A family centered diabetes management programs may be a promising strategy to reduce diabetes risk in youth while encouraging disease management among adults.

Bagley, Braden, MA

Poster 2

University of Southern Mississippi, College Arts & Humanities

Information Reliability and Recovery: Applying Uncertainty Management Theory to Disasters

Bagley, Braden, MA; Bright, Candace, PhD; Sayre, Edward, PhD; Hanks, Roma, PhD; Wraight, Sarah, BA

PURPOSE: Information timeliness and accuracy is an important factor in mental and physical health impact following a disaster. The purpose of this study is to better understand how victims of disaster, and agencies tasked with helping these victims recover, deal with uncertainty as it relates to the reliability of information regarding resources.

METHODS: A series of focus groups were conducted in the following Gulf states communities impacted by disasters: (1) Bayou La Batre, Alabama, impacted by the 2010 Deepwater Horizon Oil Spill, (2) Tuscaloosa, Alabama, impacted by the April 21, 2011 Tuscaloosa tornado, (3) Clarksdale, Mississippi, impacted by the 2011 flooding of the Mississippi River, and (4) Hattiesburg, Mississippi impacted by the tornados in 2013 and in 2017. The focus groups consisted of members of the community that represented victims, friends and family of victims, representatives from community reaching and serving organizations, and community leaders. The verbatim focus group transcripts were used for thematic analysis specifically looking at instances of information uncertainty.

RESULTS: Four different themes emerged when coding the focus group data for uncertainty management concerning information communication, including (1) victims wanting to maintain uncertainty, (2) victims wanting to reduce uncertainty, (3) victims struggling to reduce uncertainty, and (4) agencies trying to reduce victim uncertainty.

DISCUSSION: These findings confirm Brasher's (2000) theory of uncertainty management that suggests people do not always seek to reduce uncertainty, but first assess whether or not the uncertainty is good or bad. When information certainty is now equally distributed across populations, disparities in mental and physical health impacts from disasters may be exacerbated. In both the case of victims and agencies wanting to reduce their uncertainty and running into problems trying to do so, the findings of this study offer practical significance, as they highlight hurdles to reducing uncertainty regarding disaster information. These hurdles include confusion with competing information, lack of ability to receive or understand information, lack of trust in agencies, uncertainty that information will apply to them, lack of knowledge, lost ability to communicate, and technology failure.

Bahorski, Jessica, MS

Poster 3

UAB School of Nursing

Sociodemographic factors associated with parental self-efficacy in a group of first time, low-income African-American mothers

Bahorski, Jessica, MS; Childs, Gwendolyn, PhD, RN; Chandler-Laney, Paula, PhD; Azuero, Andres, PhD, MBA; Loan, Lori, PhD, RN, FAAN; Rice, Marti, PhD, RN, FAAN; Hodges, Eric, PhD, FNP-BC; Schneider, Camille, MS, RD

INTRODUCTION: Parental self-efficacy (PSE) is the belief parents have in their ability to accomplish the tasks of parenting. In Caucasian parents, sociodemographic factors, parenting experience, and psychological state are associated with PSE. Less is known regarding contributors to PSE in African-American (AA) parents. Cultural beliefs and traditions regarding parenting differ among racial and ethnic groups, therefore, it is important to understand contributors to PSE within specific subgroups. The purpose of this study was to identify factors associated with PSE in AA mothers.

METHODS DESIGN: Data for this cross sectional, descriptive study were drawn from the Infant Care, Feeding, and Risk of Obesity (Infant Care) dataset. Sample: Infant Care data were collected from first time mothers-infant dyads in the southern U.S. recruited from WIC (N=212). Instrumentation: At infant age of 3 months, PSE was measured using the Parenting Sense of Competence Scale and depression using the Center for Epidemiologic Studies Depression scale. Maternal BMI was calculated from height and weight. Infants' birthweight and sex, maternal age, education level, marital status, and income level were reported by the mother. Data Analysis: Pearson correlations were used to examine associations of PSE with infant birthweight, maternal age, or maternal BMI. Independent group's t tests and ANOVA were used to determine whether PSE differed by infant sex, maternal depression risk, marital status, income level, or maternal education level. Effect size was also calculated.

RESULTS: In this sample, mothers who were older ($r=-.19, p=0.005$), more educated ($?2=.04, p=0.011$), or at risk for depression ($d=.49, p=0.001$) reported a lower sense of PSE. These findings remained even after a False-Discovery-Rate correction (5% FDR) was performed.

DISCUSSION/CONCLUSIONS RESULTS: Extend the literature by showing that, similar to Caucasian mothers, AA mothers who are more educated or at risk for depression report a lower sense of PSE. The inverse association of age with PSE contradicts findings in Caucasian mothers; the reason for this discrepancy is unclear. It is important for nurses to consider the role of sociodemographic factors and psychological health specific to race and ethnicity for studies involving PSE.

Baker, Elizabeth H., PhD

Poster 4

UAB College Arts & Humanities, Sociology

Stressful Life Events Predict Increased Consumption of Sweets in Adolescence: Longitudinal Analysis of ELSPAC Prospective Cohort*Baker, Elizabeth H., PhD; Stepanikova, Irena, PhD; Oates, Gabriela R., PhD; Bienertová Vasku, Julie, MD; Svancara, Jan; Klánová, Jana, PhD*

PURPOSE: Stressful life events (SLE) have been associated with poor health behaviors, but their role in adolescent diet is not well understood. We examine longitudinally the association between SLE and consumption of salty snacks, sweets, and sugar-sweetened beverages among a cohort of Czech adolescents.

METHODS: This study utilizes nested fixed effects models to examine dietary changes between 11 and 15 years of age. Data were obtained from the European Longitudinal Study of Pregnancy and Childhood, the Czech Republic, collected in 2003 and 2007. Dietary quality is measured as the weekly frequency of consumption of salty snacks, sweets, and sugar-sweetened beverages. SLE are measured with a scale that accounts both for the number of stressful events and their perceived impact. Additionally, we examine whether psychological, familial, and economic resources account for the relationship between SLE and diet.

RESULTS: Cross-sectionally, increases in SLE are linked to more frequent consumption of salty snacks, sweets, and sugar-sweetened beverages. Only the consumption of sweets, however, increases significantly with SLE in the longitudinal, fixed effects models. Additionally, psychological, familial, and economic factors are not associated with diet in the longitudinal models.

CONCLUSIONS: Adolescence is a vulnerable period of increased risk for poor dietary choices. SLE among Czech adolescents lead to an increased consumption of sweets over time. These findings highlight the need for interventions that help adolescents cope with stress without resorting to maladaptive health behaviors.

Baskin, Monica L., PhD

University

UAB School of Medicine, Preventive Medicine

Preliminary Outcomes from the Pregnancy and Early Life in the South (PEARLS) Study*Baskin, Monica L, PhD; Chandler-Laney, Paula, PhD; Carson, Tiffany L, PhD; Biggio, Joseph R, MD; Blanchard, Christina, MS; Bae, Sejong, PhD*

Almost half of all US women of reproductive age are overweight or obese (BMI > 25 kg/m²), with higher rates among black women and residents in the Deep South. Although women are typically encouraged to gain weight during pregnancy to support fetal development, excessive gestational weight gain (GWG) is associated with increased risk for numerous adverse health outcomes for mother and offspring. As such, the most recent Institutes of Medicine (IOM) guidelines narrowed the range of suggested GWG among obese women (BMI > 30 kg/m²). The *Pregnancy and Early Life in the South* (PEARLS) study examined GWG, major pregnancy complications and infant weight among 208 overweight or obese black (n=140) and white (n=68) pregnant women. Participants were recruited from obstetric clinics at UAB prior to 14 weeks gestation and were followed until 6 months after delivery. On average, white participants had greater educational attainment and were more likely to be married, have private insurance, and higher incomes than black study participants. There was no difference in pre-pregnancy BMI, with an average BMI of 32.2 kg/m². Preliminary study outcomes suggest similar GWG between black and white women (average of 8.32 kg or 18.1 pounds); however, over 80% of each group exceeded IOM recommendations. There was no racial difference in the percentage of women who experienced pre-eclampsia/eclampsia during pregnancy (10% vs 11%, for white and black women, respectively). At the same time, 4% of deliveries to white women vs 1% of deliveries for black women, involved shoulder dystocia and 31% of black women vs 21% of white women underwent a cesarean section. Finally, average birth weight was approximately 124 grams (4.5 ounces) lower among infants born to black versus white mothers. Ongoing analyses in this cohort will compare social and environmental contributors to GWG and adverse obstetric outcomes in black and white women.

Bateman, Lori B., PhD, RD

Poster 5

UAB School of Medicine, Preventive Medicine

A Mixed-Methods Examination of a Short-term After School Nutrition and Physical Activity Intervention Aimed at Low Income, African American Elementary Students

Bateman, Lori Brand, PhD, RD; Oates, Gabriela, PhD; Schoenberger, Yu-Mei, PhD, MPH; Eady, Sequoya, MPH; Thompson, Joanice, BA; Norena, Maria, BSocSci; Hawk, Bianca, MSW, MPH; Bae, Sejong, PhD; Osborne, Tiffany, BA; Goyins, Sophie, BS; Fouad, Mona N., MD, MPH

PURPOSE: The purpose of this study was to examine the short-term impact of a locally developed healthy eating (HE) and physical activity (PA) intervention, Healthy Happy Kids, implemented over 6 weeks during February and March of 2015 in an after-school program in Birmingham, Alabama.

METHODS: We aimed to (1) examine dietary intake and physical activity behavior pre- and post- intervention in children (N=38) in grades Kindergarten through 5th grade through the use of Block Food Screeners and Block Kids Physical Activity Screeners, and (2) qualitatively explore the perspectives of parents/guardians (N=7) of student participants through focus groups.

RESULTS: More than 55% of the participants consumed fewer calories, less fat, and less sugar at post-intervention compared to baseline. The program had a 95% retention rate. Caregivers indicated that their children enjoyed the program, that the HE/PA perceptions and habits of both the child and the family changed, and that these changes lasted at least 6 weeks beyond the duration of the Healthy Happy Kids program. The majority of children made HE/PA improvements in a positive direction and influenced their families to make positive lifestyle choices.

DISCUSSION/CONCLUSIONS: Research suggests that interventions to promote positive changes in healthy eating and physical activity among school-aged children may need to include 2-3 weekly sessions delivered over the course of 12-16 weeks. Such a schedule may not be always feasible given constraints in support by school officials, limited financial resources, and time restrictions in school curricula. This program suggests that shorter programs may have value in improving the health habits of school-aged children and their families. Results of this research will be used to revise the existing Healthy Happy Kids program.

Beasley, Amy, DNP

Poster 6

University of Alabama Capstone College of Nursing

International missions: A lived experience in Peru

The study aimed to understand baccalaureate nursing students' experiences providing community-based care during a medical mission trip to rural Peru. In the classroom students often hear the term global health, cultural competency, and spirituality; however, they may not have experiences with each of these in the clinical environment prior to graduation. Global health has become a growing topic in healthcare and as educators it is necessary to offer students opportunities to understand how to provide appropriate care to a variety of patients. A short-term medical mission trip provided the opportunity to offer students a hands-on experience with global health, while providing culturally and spiritually competent care. In June 2016, eleven students and one faculty member went with a team of nurses, doctors, pastors, a counselor, and a dentist to provide care at rural community medical clinics. Each clinic was coordinated with a local pastor and changed locations daily. Patients had the opportunity to go through the medical, eye glass, or dental clinic and would finish at the pharmacy and spiritual counseling. Students rotated through all areas of the clinic throughout the week. All students completed daily journals on their experiences with patients, their families, and their peers. Journaling served as the source of data collection for this qualitative study. Three themes emerged throughout the journals: 1) team member relationships, 2) spiritual connections to healthcare, and 3) cultural differences. Students reflected on mostly positive experiences during the trip. A theme that emerged during a week after the return to the United States was gratefulness of their growth as nursing students in understanding cultural and spiritual differences and the importance to holistic care. International medical mission can offer important experiences in growth for nursing students, whether this be in assessment skills, cultural competence, or working with an interdisciplinary team. Cultural competence can be difficult to grasp by textbook descriptions. A hands-on experience can make cultural competence and spiritual assessment impactful and change practice for nursing students.

Brandley, Elizabeth T., MS**Poster 7**

University of Alabama, Department of Health Science

Evaluating the Impact of a Breakfast Shake on Cognitive Function in Relation to Health Disparities between College Students with and without ADHD

Brandley, Elizabeth, MS, CHES; Holton, Kathleen, PhD, MPH

PURPOSE: Consumption of breakfast replenishes the brain and body with energy after overnight fasting. Thus, omission of breakfast can have negative consequences on cognitive function. For those who suffer from cognitive deficits, such as Attention Deficit/Hyperactivity Disorder (ADHD), skipping breakfast may worsen the symptoms. ADHD is heterogeneous in etiology and has developmentally inappropriate levels of inattentive, hyperactivity or impulsivity, displayed individually or in varying combinations. College students with ADHD are in a disparity category, in which they are at a cognitive disadvantage compared to their non-ADHD peers. This difference can result in these students underperforming or dropping out of higher education, which can negatively impact their future professional success and earning potential. The resulting disparity can potentially influence socioeconomic status and future health outcomes. Furthermore, those who take stimulant medication to reduce symptoms may further exacerbate the problem of skipping meals, such as breakfast, due to the appetite-suppressing effects of the medication, which may negatively impact cognitive performance even more. The objective of this study was to investigate the impact of a nutritionally balanced breakfast shake on cognitive function in college students with and without ADHD.

METHODS: Participants with and without ADHD completed a computerized cognitive assessment after an overnight fast, including no stimulant medication and then tested again one-hour post-consumption of a nutritionally balanced breakfast shake.

RESULTS: Improvements were noted in psychomotor speed, processing speed and executive function for both groups. For those with ADHD, additional marginal improvements in processing speed, psychomotor speed and reaction time occurred, compared to those without ADHD who also improved in cognitive flexibility and motor speed.

DISCUSSION/CONCLUSION: Prior research has shown that those with ADHD have a learning disability that can impact their academic and professional success. This study found that a nutritionally balanced breakfast shake appeared to improve cognitive function in both groups. Individuals with ADHD may realize additional cognitive benefits from consuming a nutritionally balanced breakfast prior to taking their appetite-suppressing stimulant medication in the morning. These results may help improve cognitive performance in those with ADHD especially, which could potentially close the socioeconomic gap between the two groups as they age.

Callahan, Makenzie, MS**Poster 8**

UAB

Associations of Weight Status and Carbohydrate Intake with Gestational Weight Gain in African American Women

Callahan, Makenzie, MS; Schneider, Camille, RD; Gower, Barbara, PhD; Catalano, Patrick, MD; Chandler-Laney, Paula, PhD

PURPOSE: Carbohydrate (CHO) intake has been associated with gestational weight gain (GWG), but the direction of this association is inconsistent. In the general population, some evidence suggests that individuals with obesity gain more weight on a high CHO diet. Obese, non-diabetic African Americans may be particularly susceptible to weight gain on a high CHO diet because they are relatively hyperinsulinemic as compared to Caucasians. The purpose of this study was to test the hypothesis that African American women with obesity will have greater GWG when eating a high, versus low, CHO diet.

METHODS: Healthy African American women with a BMI in the normal weight (n=28) versus obese (n=25) range enrolled in this study in early pregnancy (13.2±2.1 weeks). Women completed a three-day food diary at 16-20 weeks gestation. A median split for percent kilocalories from CHO (median=49%; range: 32-75%) categorized women into highCHO versus lowCHO groups (n=12-14/group). Total GWG was calculated as the difference in body weight measured at enrollment and at the last prenatal care visit (180±23 days). Univariate analysis of covariance was used to examine whether the association of weight status with GWG differed for women in the highCHO versus lowCHO groups, after adjusting for total energy intake.

RESULTS: A significant interaction between weight status and CHO content of the diet was found (P<0.05), such that there was no difference in GWG for women who were normal weight and consumed a highCHO versus lowCHO diet (13.1±4.3 kg vs 15.5±9.5 kg), but for women who were obese, those in the lowCHO group had less GWG than those in the highCHO group (7.3±4.8 kg vs 13.8±7.3 kg). The interaction did not change after adjusting for total energy intake.

DISCUSSION/CONCLUSIONS: Results suggest that intake of a relatively low CHO diet may help limit GWG among African American women with obesity. Future research should examine whether differences in insulin sensitivity and secretion explain why CHO content of the diet was associated with GWG for women with obesity, but not those of normal weight.

UAB School of Medicine

Evaluating Triage Bias in a Pediatric Emergency Department

Campbell, Christine, MD MSPH; Pruitt, Chris, MD; Glaeser, Pete, MD

INTRODUCTION: The medical profession is becoming increasingly aware that unconscious bias affects the behaviors of medical professionals. Recently some studies have shown that racial bias occurs in the workup, treatment, and disposition of patients in healthcare settings. This study aims to evaluate the presence of racial and socioeconomic bias in the acuity assignment in pediatric emergency triage.

METHODS: Participants are all patients seen in an urban pediatric emergency medicine department that went through normal triage, excluding resuscitations or traumas. Data is obtained from the hospital electronic medical record. Patient chief complaints were manually categorized into similar groups by the lead author, then sorted by order of occurrence. The top ten most common chief complaint categories, which accounted for approximately half of all patient visits, were each examined for evidence of racial or socioeconomic bias by acuity level assignment. We hypothesized that there would be no difference in emergency severity index (ESI) level across race or median household income of home ZIP code. Nonparametric testing was performed on the data. Patient race categories were primarily either white or black.

RESULTS: Comparing the ESI level within the same chief complaint using Wilcoxon Rank Sum Test for two independent samples showed a significant difference of median ESI level across 9 of the 10 chief complaint categories ($p < 0.05$) in 2-tailed tests, suggesting that black patients are assigned lower acuity levels compared to white patients. Socioeconomic status was proxied using median household income from the patient's reported home ZIP code, and each patient was assigned to one of five income categories based on this. Comparing ESI levels by income category within the same chief complaint, the Kruskal-Wallis Test for five independent samples shows a significant difference of median ESI level in 8 of 10 chief complaint categories ($p < 0.05$) in two-tailed tests, suggesting that patients who live in poorer areas are assigned lower acuity levels compared to patients who live in wealthy areas.

Chaudhary, Pankaj, PhD

Poster 9

University of North Texas Health Science Center

Racial Variation in Annexin A2 Gene Expression and Poor Outcome in Triple-Negative Breast Cancer

Chaudhary, Pankaj, PhD; Desai, Priyanka, MS; Vishwanatha Jamboor, PhD

PURPOSE: Triple-negative breast cancer (TNBC) is identified by the absence of three major receptors (estrogen receptor, progesterone receptor, and human epidermal growth factor receptor 2) that drive most breast cancers. The incidence of TNBC is associated with health disparity due to its disproportionate occurrence in African-American (AA) women. Studies have shown that Annexin A2 (AnxA2), a calcium-dependent phospholipid binding protein, is overexpressed in TNBC, but its association with racial variation and outcomes is unknown.

METHODS: AnxA2 gene expression was evaluated in breast cancer subtypes from The Cancer Genome Atlas (TCGA)-Breast Invasive Carcinoma mRNA database that include 1,094 patients. Associations between clinical outcomes and AnxA2 gene expression were tested in a genome wide association study of combined publicly available datasets that include 4,147 patients. Immunohistochemistry of normal and breast tumor tissues were scored by a clinical pathologist to provide scores (0,+1,+2,+3) based on AnxA2 staining intensity.

RESULTS: AnxA2 gene expression was significantly increased in TNBC in comparison to other breast cancer subtypes. Furthermore, AnxA2 gene expression was significantly elevated in AA ($n=158$) women in comparison with Caucasian (CA; $n=654$, $P < 0.0001$) and Hispanic (HA; $n=51$, $P < 0.0001$) women. High expression of AnxA2 were associated with reduced overall survival [hazard of death = 2.66; 95% confidence interval (CI) = 1.14 - 6.25, $P = 0.0192$], reduced relapse free survival [hazard of relapse = 1.45; 95% confidence interval (CI) = 1.12 - 1.89, $P = 0.0051$], and reduced distant metastasis free survival (hazard of metastasis = 1.7; 95% confidence interval (CI) = 1.00 - 2.91, $P = 0.048$) in TNBC (basal-like intrinsic subtype). AnxA2 gene expression was not associated with poor outcome in other breast cancer subtypes, such as Luminal A, Luminal B, and HER-2, indicating the specific association of AnxA2 with the aggressive behavior of TNBC. Analysis of breast tumor subtypes and normal tissues confirmed that AnxA2 is highly expressed in TNBC compared to its low to negligible expression in other subtypes and normal tumors.

DISCUSSION/CONCLUSION: AnxA2 has potential prognostic and diagnostic value, implicating its role in the aggressive biology of TNBC in AA women.

Clay, Olivio J., PhD

UAB College of Arts and Sciences, Psychology

Associations of Social Determinants and Medical Conditions with Health-related Quality of Life among Older African American Men*Clay, Olivio J., PhD; Perkins, Martinique, PhD; Wallace, Gail, PhD; Crowe, Michael, PhD; Sawyer, Patricia, PhD; Brown, Cynthia J., MD*

PURPOSE: African American (AA) men battling multiple morbidities are tasked with managing the components of each condition and are at greater risk for adverse outcomes such as poor health-related quality of life (QOL), disability, and higher mortality rates. This investigation will assess the relationships of social determinants of health and categories of medical conditions with QOL within a sample of older AA men in the Deep South.

METHODS: Baseline data for AA men from the University of Alabama at Birmingham Study of Aging were utilized. Factor analysis was used to categorize medical conditions and create factor scores. Covariate-adjusted regression models assessed the relationships between social determinants of health and categories of medical conditions with physical and mental health-related QOL as assessed by the SF-12.

RESULTS: The mean age of the sample of 247 AA men was 75.36 years and 49% lived in rural areas. Medical conditions fit into 3 factors: metabolic syndrome, kidney failure and neurological complications, and COPD and heart disease. Covariate-adjusted models revealed that low education, higher levels of income difficulty, and higher scores on metabolic syndrome and COPD and heart disease factors were associated with lower scores on physical health-related QOL, p 's < .05. Higher levels of income difficulty were also associated with lower scores on mental health-related QOL, p < .0001.

DISCUSSION/CONCLUSIONS: These findings suggest the importance of examining social determinants of health and clusters of comorbid medical conditions and their relationships to QOL within older AA men.

Cody, Shameka, PhD**Poster 10**

University of Alabama Capstone College of Nursing

The Effects of Speed of Processing Training and Transcranial Direct Current Stimulation on Global Sleep Quality and Speed of Processing in Older Adults with and without HIV*Cody, Shameka, L., PhD, AGNP-C, Wheeler, Pariya, F., PhD, Crowe, Michael, PhD, Kempf, Mirjam-Colette, PhD, Moneyham, Linda, PhD, Stavrinou, Despina, PhD, & Vance, David, E., PhD*

PURPOSE: Generally, some adults experience problems sleeping as they age; however, adults aging with HIV may be more likely to experience poor sleep which can negatively affect their cognitive functioning. Independently, transcranial direct current stimulation (tDCS) and cognitive training have been shown to improve sleep quality in older adults. This study examined the combined effects of tDCS and speed of processing (SOP) training on global sleep quality and SOP in older (50+) adults with and without HIV.

METHODS: Thirty-three adults with HIV and 33 adults without HIV were randomized to participate in ten 1-hr sessions of either tDCS + SOP training or sham tDCS + SOP training over 5 weeks. The anodal electrode was placed above the left sphenoid bone and the cathodal anode was placed on the contralateral upper arm. At baseline and posttest, participants were administered a neurocognitive battery and the Pittsburgh Sleep Quality Index.

RESULTS: At baseline, adults with HIV had significantly poorer sleep quality and worse performance on the Letter Comparison Test compared to adults without HIV. Although sleep quality did not improve for any of the groups at posttest, scores on the Useful Field of View, a speed of processing measure, improved across all groups. For the Digit Copy Test, a main effect for HIV ($F[1, 59] = 5.26, p = .03$) and a main effect for tDCS ($F[1, 59] = 5.16, p = .03$) were detected; those who had HIV and/or received sham tDCS with SOP training performed better on the Digit Copy Test. A HIV by tDCS interaction on the Letter Comparison Test was significant ($F[1, 59] = 5.50, p = .02$).

CONCLUSION: tDCS as an adjunct therapy to improve sleep should be further explored with consideration of several factors (e.g., placement of electrodes, amount of amperage, exposure time, number of sessions). Certainly, other types of transcranial electrical stimulation therapy should be considered to determine the safest and most effective techniques to improve sleep and sleep-related cognitive function in the aging HIV population.

Cooper, Moriah, BS

Poster 11

Central Michigan University School of Health Professions

Accessibility and Advocacy in Midwifery Services in Racially Disproportioned Communities

Cooper, Moriah, PhD; Shingles, Rene R.

PURPOSE: Midwifery has a rich history in the Black community and often times the midwife has a connection to the profession deeper in her personal values. However, little is known about this group of women, their perception of barriers to midwifery services in racially despair communities; insight and advice in diversifying the midwifery movement. As such, we have chosen to interview this group of women. Understanding the barriers to African American women receiving midwifery services.

METHODS: The study will be a qualitative study, face to face interviewing 5-8 midwives, doulas or Certified Nurse Midwives. Selecting each participant via snowballing method and web search. We will use the interview protocol from Skyla Seamans. Interviews will take approximately thirty minutes to one hour.

RESULTS: Our study found recurrent themes of fear, cost and education level. As women in racially disproportioned communities risk increase, they become skeptical of pursuing the home birth movement remains stagnant. The significance of this research is found in the advocacy methods to promote home birth midwifery an option for delivery regardless of culture, socioeconomic background or race. According to previous literature conducted by Skyla Seamans (2015), she found the cost, lack of advocacy for women of color in the homebirth movement and the privilege to have a home birth excluded this group of women from a healthy option of delivery.

CONCLUSION: The modern midwifery movements advocates for women to choose a natural birth without medical intervention. Removing the fear of childbirth and empowering women to take pride in their choice. Diversity, accessibility, and cost are the core concerns in order to diversify the demographics of women using as well as providing midwifery services.

Danos, Denise, PhD

Poster 12

LSU School of Medicine, Stanley S. Scott Cancer Center

Utilizing Electronic Health Records to Evaluate Racial Disparities in Metabolic Syndrome

Danos, Denise, PhD; Kepper, Maura, PhD; Price-Haywood, Eboni, MD, MPH; Leonardi, Claudia, PhD; Ferguson, Tekeda, PhD; Scribner, Richard, MD, MPH

PURPOSE: Metabolic syndrome is defined as a clustering of clinical metabolic conditions (increased blood pressure, high blood sugar, increased body fat, abnormal cholesterol or triglycerides) and has been associated with an increased risk for several chronic diseases, such as cardiovascular disease. The aim of this project was to identify individuals presenting with metabolic syndrome using a computational patient phenotype definition derived from electronic medical records (EHR) clinical outcomes data. Secondly, this project evaluated racial disparities in metabolic syndrome across Southeast Louisiana.

METHODS: Data was obtained through Research Action for Health Network (REACHnet). Using the National Patient-Centered Clinical Research Network Common Data Model, REACHnet has standardized and made usable EHR data for patient-centered research across Louisiana and Texas. The computational patient phenotype definition for metabolic syndrome was developed based on the National Cholesterol Education Program Expert Panel in Adult Treatment Panel III (NCEP III) guidelines. The presence of metabolic conditions was established using ICD9 Diagnosis codes, patient vitals and lab results that are routinely available in EHR data. Logistic regression models to assess racial disparities were executed using SAS 9.4.

RESULTS: We analyzed 18,664 patient EHRs for individuals 18 years or older with complete clinical data spanning the years 2013 to 2014. The sample was 43.28% male (n=8,077) and 29.35% black (n=5,477). Based on the patient phenotype definition, the prevalence of metabolic syndrome in the sample was 39.09%. Controlling for age, the odds of metabolic syndrome were twice as high for black women than for white women (OR= 2 (1.83, 2.18)), while the odds were 15% greater for black men than for white men (OR: 1.15 (1.04, 1.28)).

CONCLUSION: We observed significant disparities in the prevalence of clinically evident metabolic syndrome in southeast Louisiana. Racial disparities were greatest among women. It has been increasingly recognized that differential exposure to chronic social and nutritive stress from living in a disadvantaged neighborhood may be contributing to racial health disparities. Further research in this sample will link ancillary sources of neighborhood data to the successfully-developed metabolic syndrome phenotype to explore potential mechanisms for racial disparities in a clinical population.

Danos, Denise, PhD**Poster 13**

LSU School of Medicine, Stanley S. Scott Cancer Center

Assessing the role of neighborhood environment in Triple Negative Breast Cancer disparities using geographically referenced state cancer registry data*Danos, Denise, PhD; Scribner, Richard, MD, MPH; Hossain, Fokhrul, PhD; Gilliland, Aubrey, BS; Wu, Xiao-cheng, MD, MPH*

PURPOSE: Triple Negative Breast Cancer (TNBC) is an aggressive, heterogeneous subtype of breast cancer that is diagnosed disproportionately more frequently in African American (AA) women than in European American (EA) women. In this study, we analyzed the role of a robust measure of neighborhood physical and social environment (i.e., neighborhood concentrated disadvantage) in racial disparities in TNBC incidence, stage at diagnosis, and stage-specific survival.

METHODS: Louisiana Tumor Registry and US Census data were used to assess disparities in cancer outcomes for women diagnosed with TNBC in 2010-2012. Cases were geocoded to 2010 census tracts by address at time of diagnosis. Neighborhood concentrated disadvantage index (CDI) was calculated based on the PhenXToolkit protocol. Outcomes were analyzed using multilevel models of individuals nested within neighborhoods; Incidence and stage at diagnosis were modeled with mixed effects generalized linear models and survival was analyzed using cox proportional hazard models. All statistical analyses were performed in SAS version 9.4.

RESULTS: We identified 1,216 cases of histologically confirmed TNBC in Louisiana for the study period. Controlling for age at diagnosis, AA women had 2.21 fold risk of TNBC compared to EA [95% confidence interval (CI): (1.96, 2.48)]. TNBC incidence was independent of neighborhood CDI. We observed significant racial disparities in stage at diagnosis, with AA women more often diagnosed at later stages [odds ratio (OR): 1.42 (1.11, 1.81)]. In contrary to what we found for incidence, CDI was associated with more advanced stages of TNBC at diagnosis [OR: 1.20 (1.03, 1.39)] and adjusting for CDI reduced the estimated racial disparity [1.17 (0.88, 1.56)]. Similarly, controlling for stage, age and race, CDI was significantly associated with poorer patient survival [HR: 1.19 (1.01, 1.39)].

CONCLUSION: While the incidence of TNBC appears to be independent of neighborhood environment, neighborhood level effects of concentrated disadvantage did explain observed racial disparities in both stage at diagnosis and stage-specific survival in TNBC patients. Overall, our results suggest that the increased incidence of TNBC in AA women is mainly due to biological risk, while neighborhood environment has a greater impact than race on the promotion and progression of the disease.

Dreer, Laura, PhD**University**

UAB School of Medicine, Department of Ophthalmology

Examination of Problem Weight and Social Determinants Among People with Vision Impairments: Implications for the Development of a Tailored, Weight Management Behavioral Health Program*Dreer, Laura E., PhD; McBrayer, Alexandra, MS; Samuels, Brian, MD, PhD; Cox, Molly, MS; Witherspoon, Douglas, MD; Hunter, Gary, PhD; Bryan, David R., MA; Clay, Olivio, PhD; Vogtle, Laura, OTR, PhD; Feist, Richard, MD; Rhodes, Lindsay A., MD; Hunter, Gary; Rogers, Laura, MD*

PURPOSE: To determine 1) the prevalence rate of obesity and overweight problems among people with a progressive eye disease (diabetic retinopathy, glaucoma, age-related macular degeneration: AMD), 2) potential health disparities related to problem weight, and 3) interest in losing weight among people with progressive eye diseases.

DESIGN: Observational, cross-sectional design. Participants: N = 131 adults diagnosed with a progressive eye disease have been collected to date as part of this ongoing study. Average age is 68 years (SD = 13.23) and 61% are Caucasian (N = 80) and 39% African American (N = 51). Main Outcome Measures: Objective body mass index (BMI), sociodemographic characteristics, health behaviors/preferences, and interest in losing weight were collected.

RESULTS: Overall, weight classifications/prevalence rates were 20.5% normal, 26.5% overweight, and 53% obese. Higher BMI scores were significantly associated with being African American, older age, lower annual household income, poorer perception of health, greater number and type of chronic health conditions (e.g., diabetes, sleep apnea, low blood pressure, nerve damage), lower physical activity levels, greater sedentary behavior (e.g., watching television), and greater worry over health. Seventy percent of the sample expressed an interest in losing weight.

DISCUSSION: A large proportion of persons with progressive eye diseases are at high risk for obesity and being overweight. The rates observed are higher than the national average of observed in non-disabled individuals living in the United States. The findings also suggest health disparities related to this particular disability, with African Americans being at greatest risk. Approximately three quarters of the sample expressed an interest in losing weight. As such, this formative research project will help provide relevant information necessary to understanding problem weight and identifying key social determinants related to obesity and being overweight among persons with progressive eye diseases. This information will help to inform the development of a health promoting weight management program designed specifically for persons with this type of sensory disability and target the determinants related to those at greatest risk.

Fifolt, Matthew M., PhD

Poster 14

UAB School of Public Health, Health Care Organization and Policy

Jones Valley Teaching Farm: A Community-based Approach to Health Promotion and School Connectedness

Fifolt, Matthew, PhD; Morgan, Amy, PhD; Burgess, Zoe, MA; Storey, Amanda, BA

PURPOSE: The purpose of this research was to explore student and parent/guardian [“Parent”] experiences with Jones Valley Teaching Farm (JVTF) activities, specifically Farm Lab Club, Farmer’s Market Club, and the Teaching Farm at Woodlawn High School.

METHODS: A descriptive case study design was used to capture experiences with JVTF, a 501(c)(3) nonprofit with the goal of providing food education and access to students in the Birmingham City Schools System. Primary data were drawn from five student focus groups (n=33) and four parent focus groups (n=25).

RESULTS: Findings revealed a high level of student, family, and community engagement based on student involvement in JVTF activities. Students and parents reflected on increased levels of student responsibility/accountability in the Teaching Farms and Farmer’s Market. Similarly, students demonstrated increased levels of self-efficacy as reflected by personal growth, life skills, and career exposure. Finally, students and parents discussed the valuable relationships students developed as a result of their participation in these activities, including peer-to-peer, student-to-instructor, and student-and-parent relationships. Notably, students and parents spoke about the significant roles of JVTF instructors who frequently served as mentors to students. The value of these relationships, especially among urban youth, is well-supported in the research literature.

DISCUSSION/CONCLUSIONS: According to Lake (2015), Director of the Center on Reinventing Public Education, “America is at a profound moment of social struggle...School improvement cannot wait for us to solve poverty or racial injustice. We can create great school options now for young people that can help mitigate these other social challenges.” The results of this study suggest that JVTF provides intentional and meaningful opportunities for at-risk students to thrive in an educational environment that typically offers few opportunities for hands-on learning. As discussed by DeArmond et al. (2015), if we are serious about improving retention and graduation rates among at-risk students, we can no longer continue with business as usual. Rather, we must create positive and enriching experiences for students that encourage them to persist. Results from this research depict JVTF as the type of program that consistently provides interactive and engaging experiences for students-experiences that disrupt the status quo.

Foster, Bethany M., MPH

Poster 15

Wayne State University School of Medicine, Emergency Medicine

May Measurement Month 2017: Hypertension Prevention Initiative

Foster, Bethany M., MPH; Dawood, Katee, MS; Grappy, Revelle; Risk, Hassan; Wheaton, Maxwell; Ottolini, Jonathon; Levy, Phillip, MD, MPH

PURPOSE: In partnership with the International Society of Hypertension, Wayne State University Department of Emergency Medicine performed 1,765 blood pressures (bps) at Detroit Receiving, Sinai-Grace and Harper University Hospitals during the inaugural May Measurement Month (MMM). Over 100 countries participated in MMM and our department was the leading United States partner. MMM was established to improve awareness regarding blood pressure globally. Individuals worldwide promoted the importance of screening and health education.

METHODS: Blood pressures and other demographic information were taken in three Detroit emergency departments (EDs) and during three community health events.

RESULTS: The average blood pressure was 133.7/82.8 and the average pulse was 82.8. Of the 1,765 individuals screened, 81.6% identified as African American and 58.5% were female. The average age was 44.3 years old. About 20% remembered the last time they had their blood pressure checked and 32.5% stated they were currently taking high blood pressure medication. Of the 584 individuals with a systolic blood pressure greater than or equal to 140, 58% were currently on high blood pressure medicine. Of those individuals with a high systolic blood pressure, 3.9% reported having had a heart attack in the past and 5.1% reporting having had a stroke. The department distributed 85 blood pressure cuffs to those with high blood pressure readings so that they could track their future readings at home. Those without a primary care physician were referred to a clinic embedded in the ED.

DISCUSSION/CONCLUSIONS: The data collected throughout this initiative has provided insight of the global burden of hypertension and what practices can address it in different communities. In the city of Detroit, we found that even though individuals with HTN are on medication, a large portion still do not have their blood pressure controlled. This may indicate that medication adherence is an issue as well as patient-provider communication.

Gaglioti, Anne, MD**Morehouse School of Medicine, National Center for Primary Care****Individual and Ecologic Impacts on the Relationship between Waist Circumference and Coronary Heart Disease in Racial/Gender Subgroups in the REGARDS Study***Gaglioti, Anne H, MD; Rivers, Desiree, PhD; Bryan, Joanna, MPH; Safford, Monika M, MD*

PURPOSE: There are racial disparities in obesity and coronary heart disease (CHD) mortality. Waist circumference (WC) is associated with cardiovascular events and may be influenced by individual socio-demographic variables and ecologic variables, as CHD and obesity have been shown to be. We undertook this study to describe how the association between WC and development of incident CHD is influenced by individual and ecologic factors.

METHODS: The sample included participants in the Reasons for Geographic and Racial Differences in Stroke (REGARDS) Study between 2003 and 2014. The primary outcome variable was development of incident CHD. The predictor variable was quartiles of WC. We modeled the association between WC and CHD in the entire sample, and in racial/gender subgroups using bivariate and multivariate Cox Proportional Hazards regression models. Multivariate models adjusted for individual level covariates including CHD risk factors and socio-demographic characteristics. Ecologic covariates included primary care physician supply, poverty, rural/urban status, and segregation.

RESULTS: There were 23,021 individuals with 1,157 CHD events during the study period. In unadjusted and full models for the entire sample and for white men, white women, and black women, there was increased risk of incident CHD in the upper quartile of WC compared to the first quartile. There was no relationship between WC and incident CHD among black men. Individual socio-demographic variables, including CHD risk factors nor ecologic covariates did not attenuate the relationship between WC and incident CHD.

DISCUSSION/CONCLUSIONS: Although the relationship between incident CHD and sociodemographic factors is well documented, we did not observe that individual or ecologic sociodemographic or health services factors influenced the relationship between WC and development of CHD. One limitation of this study is that WC was only measured at the beginning of the study. Change in WC may be influenced by treatment of risk factors for CHD, which may be impacted by access to primary care providers. Further work is needed to explore the paradoxical relationship between WC and CHD observed among black men.

Hall, Eleanor M., PhD, RN, MSN**Centennial II****Thomas University School of Nursing****Social Ecology of Adherence to Hypertension Treatment in Latino Migrant and Seasonal Farmworkers**

PURPOSE: This study explored social determinants of health (blood pressure [BP] knowledge, perceived stress, acculturation, health literacy, and health care access [HCA]) that influence adherence to hypertension (HTN) (medication adherence, BP self-care, and BP control) treatment among Latino migrant and seasonal farmworkers (MSFWs). Application of Bronfenbrenner's Ecological Systems Theory allowed for examination of social ecological factors that influence adherence to HTN treatment among MSFWs.

DESIGN: A cross-sectional correlational study was conducted.

METHOD: Forty-five Latino MSFWs from two farmworker health clinics completed Spanish versions of the Morisky Medication Adherence Scale, the BP Knowledge Scale and BP Self-care Scale, the Perceived Stress Scale, the Acculturation Rating Scale for Mexican Americans-II, the Short Assessment of Health Literacy for Spanish-Speaking Adults, and health care access questions. BP control was measured by averaging two BP measurements and coded as controlled or uncontrolled.

RESULTS: MSFWs had poor medication adherence (42%). The majority of the participants had poor BP control. Higher acculturation level was associated with better BP control ($\chi^2 (2, N=43) = 9.06, p < .01$). BP knowledge, perceived stress, acculturation level, and health literacy accounted for 49% ($R^2 = .49$, Adjusted $R^2 = .43$) of the variation in BPSC and was statistically significant, $F(4, 44) = 9.424, p < .001$. Latino MSFWs with higher BP knowledge ($B = .49, \beta = .599, p < .001$) and were more acculturated ($B = -.280, \beta = -.237, p < .05$) evidenced significantly higher BPSC.

DISCUSSION: MSFWs had poor medication adherence and BP control. The odds ratio for acculturation and BP control indicated that acculturated MSFWs are 3.56:1 more likely to adhere to their antihypertensive medication. The multiple regression model for BPSC demonstrated that the predictor variables statistically significantly predicted BPSC.

IMPLICATIONS: Findings indicate the need for additional culturally appropriate education that encourages HTN medication adherence, BPSC as well as health care strategies that address the social ecological determinants of poor HTN medication adherence and BPSC among Latino MSFW.

Hanks, Roma, PhD

Poster 16

University of South Alabama

“See It - Say It”: A Pilot Project to Explore Community Members’ and Policy Makers’ Understandings of Concepts around Successful Aging and Livable Communities

Hanks, Roma, PhD; Estes, Barbara

Successful Aging was introduced almost a quarter century ago as the basis for a “new gerontology” (Rowe and Kahn, 1998). The concept continues to inspire both research and practice in the field of aging and health. The recently launched AARP Disrupt Aging campaign is built on the successes of “medical science and the intrepidity of the boomer generation” (aarp.org, 2015). But we question whether older individuals and policy makers have similar perceptions of successful aging and the health care and social policies that contribute to success over the life course. Our focus has been on understanding policies around “livable communities.” Healthy community designs, also known as built environments, ensure livable communities in which youth and families can thrive and seniors, from the comfort of their own domiciles, continue working, retire with hobbies, and are best engaged in the social life to which they have become accustomed. However, an unpublished photo-voice project at the University of South Alabama showed evidence linking unsafe communities and those in which infrastructure has been poorly maintained with high health disparities and overall poor health of residents. Livability of the community is not at issue for a single generation; evidence is strong that seniors in particular overwhelmingly prefer to remain in their own communities rather than relocate to supportive housing or nursing homes (AARP 2007, Morgan 2014). Through town hall style meetings and focus groups, we explored how communities of older citizens understand the concepts “livable communities” and the policies that support and sustain them. Further, we conducted focus groups and interviews with local policy makers to explore the match between community priorities and existing policies. Finally, we brought the themes (priorities) developed by the community to the table with policy makers. This poster reports on the research process as well as our success with policy makers in achieving incorporation of community-generated priorities into current and future policy for our community.

Hendrix, Sara, MS

Poster 17

University of Alabama

Year-Long Weight Changes among Children Residing on Cambodian Floating Villages of Tonle Sap Lake

Hendrix, Sara, MS; Herron, Robert; Leatherwood, Matthew; Turner, Lori, PhD, RD

PURPOSE: To monitor, summarize, and analyze weight changes in young children living on two of the floating villages of Tonle Sap Lake, in Cambodia, over the period of one year.

METHODS: Participants (n = 92, aged ≈ 1 - 12 years) were recruited from the floating villages of Akul and Kompong Prak of Pursat Province, Cambodia. Cambodian surveyors recorded the participants’ weight at baseline and then over a twelve-month period. Data were aggregated and analyzed. Paired sample t-tests were used to test for differences between the first (Pre) and final (Post) weights.

RESULTS: Data from the participants were separated into age groups for appropriate comparisons using their age at the first measurement. The age groups included ages < 1 - 2 years old (Group 1), 3 - 5 (Group 2), 6 - 8 (Group 3), 9 - 11 (Group 4). All groups gained weight over the period of interest [Group 1; Pre = 9.0 ± 1.6 kg vs Post = 10.5 ± 1.2 kg, $p < 0.001$, Group 2; Pre = 12.4 ± 2.1 kg vs Post = 13.4 ± 2.3 kg, $p < 0.01$, Group 3; Pre = 16.6 ± 3.3 kg vs Post = 18.0 ± 3.3 kg, $p < 0.001$, and Group 4; Pre = 21.9 ± 4.6 kg vs Post = 23.3 ± 4.1 kg, $p < 0.01$.]

DISCUSSION/CONCLUSION: Children from these floating villages gained weight over the year of this study. It should be noted, that the weight change averages were relatively small for each age group (Group 1 ≈ 17%, Group 2 ≈ 8%, Group 3 ≈ 8%, and Group 4 ≈ 7%). For most age groups, the floating village average weights were lower compared to non-water dwelling norms (Group 2 ≈ 3.7 kg, Group 3 ≈ 6 kg, Group 4 ≈ 6.9 kg).

Floating villages present many unique public health challenges that may cause adverse developmental consequences such as wasting and stunting due to a lack of access to sanitary water, health care, and malnutrition.

Johnson, Roman B.**Poster 18**

UAB College of Arts and Sciences, Department of Sociology

Early marriage and child malnutrition in Bangladesh: Examining the mediating roles of mother's education and autonomy

Johnson, Roman B.; Uddin, Jalal; Baker, Elizabeth E.

INTRODUCTION: Despite improvements in recent decades, child malnutrition still remains a critical public health issue in many developing countries. Recent estimates suggest that Asia and Africa bear the greatest share of child malnutrition in the world. The rates of child malnutrition in Bangladesh are among the highest in the world. We examined associations between maternal early marriage (marriage before age 18) and malnutrition of children under 5 in Bangladesh.

METHODS: This study used cross-sectional data from Bangladesh Demographic and Health Survey 2014. The main outcomes were binary measures of stunting and underweight status of the children under 5. We used logistic regression models adjusted for maternal and child demographics as covariates.

RESULTS: In general, results indicate that maternal early marriage has both direct and indirect effects on stunting and underweight status of the children under 5. The likelihood of stunting and underweight is higher in young children born to mothers married as minors than in those born to women married at age 18 or above. Adjusted models suggest that inclusion of maternal education and autonomy in the household decision making significantly attenuated the associations. The household wealth status, maternal work status, place of residence, and media exposure appeared to significant predictors of child malnutrition outcomes.

CONCLUSIONS: Findings have implications for addressing child marriage and interventions for improving socio-economic circumstances under which child marriage takes place. Further research may examine how early marriage affects mother's decision-making for food budget, child feeding, and accessing healthcare for children in Bangladesh.

Jones, Loretta, PhD**Poster 19**

University of South Alabama School of Nursing, Adult Health

Southern African American Women's Perception of Coronary Artery Disease After a Myocardial Infarction: A Phenomenological Inquiry

INTRODUCTION: The American Heart Association (AHA) reported that cardiovascular diseases kill nearly 50,000 African-American (AA) women annually. Only 52% of AA women are aware of the signs and symptoms of a heart attack and only 36% of AA women know that heart disease is their greatest health risk.

PURPOSE: The purpose of this phenomenological study was to explore the lived experience of African American women, 50 years and older, who had experienced a myocardial infarction (MI) within the past five years. This study was consistent with the goal to decrease health disparities of AA women post MI and the *Healthy People 2020* goal to improve cardiovascular health through prevention, detection, and treatment of risk.

METHODS: The phenomenological method of research was used utilized to conduct the study. The primary data collection source were semi-structured interviews conducted using open-ended questions. The research questions addressed the women's knowledge of risk factors, and their perceptions of management, and lifestyle changes relevant to coronary artery disease post-MI. Participants were seven AA recruited from local cardiology offices with histories of myocardial infarction. The phenomenological data analysis involved the processes of coding, categorizing, and developing themes.

RESULTS: The findings revealed six major themes: life before myocardial infarction, contributing risk factors, early warning signs, life after myocardial infarction, cardiac rehabilitation, and family support.

CONCLUSIONS: The majority of women reported unrecognized risk factors prior to MI but are now able to recognize and heed early warning signs, and made lifestyle changes post MI to prevent a recurrence. However, none of the women attended cardiac rehabilitation, and only one having been referred for rehabilitation. These findings provided a beginning foundation for the development of interventions that are predictably effective in prevention of MIs in AA women.

UAB

Understanding ART in Improving the HIV Treatment outcomes for HIV+ Adolescents (10-24 years) in rural Swaziland: A Cross Sectional Study

Joseph, Sherna; Anyanwu, Cristeen; Jepkemboi, Grace, PhD; Pauline, Jolly E., PhD

The 2014 UNAIDS Swaziland Global AIDS Response Progress showed that HIV Prevalence among 15 -24-year old was 34.7%. The objective of this study was to assess ART knowledge in improving HIV Treatment outcomes for HIV positive adolescents in rural Swaziland. A cross sectional study was conducted among 624 HIV positive adolescents receiving their care at 23 public health units in the regions of Hhohho, Manzini, and Lubombo. Questionnaires were administered to the adolescents. The prevalence of individuals who were told of their HIV status was 71.8 %. In terms of ART Adherence Knowledge, majority of the disclosed respondents understood ART (52.7%) and know why they are taking the medication (89.3%). A significantly higher number of individuals who were told their HIV status knew the names of the medicine they were taking compared to individuals who were not told their status. Knowledge about where to access ART was significantly higher among adolescents who knew their status compared with adolescents who did not know their status. Additionally, participants knew to take ART medication with food and the importance to adhere to ART was almost equally reported by the two groups. The findings from this study shows the need for interventions to support caregivers who will share HIV status to adolescents.

UAB

Pathways to Poor Nutritional Status Among Low-Income Older Adults: Examining the Interconnection Between Self-Care Capacity, Food Insecurity, and Depression

Seung Eun Jung, PhD, RD; Seoyoun Kim, PhD; Alex Bishop, PhD; Janice Hermann, PhD, RD

BACKGROUND: Nutritional status is multifactorial, meaning it can be influenced by a number of factors such as food insecurity, self-care capacity, and depressive symptoms. However, the relationship between food insecurity, self-care capacity, depressive symptoms and nutritional status has not been fully examined among low-income older adults.

OBJECTIVE: The purpose of this study was to examine the complex relationships between self-care capacity, depressive symptoms and nutritional status among low-income older adults.

DESIGN: The cross-sectional study was conducted from February 2017 to May 2017. Participants/setting: Low-income older adults, 60 years of age and older, living in the state of Alabama participated in this study. Main outcome measures: Participants completed a validated survey measuring food insecurity, self-care capacity, depressive symptoms and nutritional status. Statistical analyses performed: Generalized structural equation modeling (GSEM) was used to include the simultaneous equations and multiple mediators in one model. The Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC), and likelihood ratio tests were conducted to compare the fit of competing model specifications.

RESULTS: Participants with lower self-care capacity had greater food insecurity status ($b=0.4$, $OR=1.49$, $p<.05$). In addition, participants with poorer self-care capacity and higher depressive symptoms had poorer nutritional status ($b=0.88$, $OR=2.42$, $p<.001$; $b=0.15$, $OR=1.16$, $p<.01$, respectively). Further, participants with lower self-care capacity experienced higher depressive symptoms ($b=0.15$, $OR=1.16$, $p<.01$). Moreover, participants with higher food insecurity were more likely to experience depressive symptoms ($b=0.40$, $p<.001$). Results showed that self-care capacity exerted both direct and indirect effects on nutritional status through depressive symptoms ($b=0.03$, $p<.05$). Furthermore, food insecurity influenced nutritional status indirectly through depressive symptoms ($b=0.06$, $p<.05$).

CONCLUSIONS: Study findings imply that dietitians, nutritional health care professionals, and health care policy makers should be cognizant in developing educational programming and policies that combat food insecurity and enhance the emotional health of low-income older adults challenged by functional limitations.

King, Dione, PhD

UAB College of Arts and Science, Social Work

Preconception health literacy and infant mortality disparities: Improving minority health knowledge through a community-based approach*King, Dione, PhD; Donley, Tiffany, DHSc, MPH; Mbizo, Justice, DrPH; Jordan, Erica, PhD*

PURPOSE: Attack Infant Mortality (AIM) Escambia was developed as a community-based multi-disciplinary initiative to address increased infant mortality rates among African American women in a specific community. The core goals of AIM Escambia were to 1) provide preconception health peer educator training, 2) increase knowledge of preconception health behaviors, and 3) create community awareness related to infant mortality. It was hypothesized that participants would possess limited knowledge of preconception health behaviors (e.g. smoking, nutrition, sexual risk behaviors) and their overall health literacy, behaviors, and attitudes would increase upon completion of the program.

METHODS: The AIM Escambia curriculum was designed utilizing a modified version of the Office of Minority Health (OMH) Preconception Health Peer Educator program. Snowball sampling methods were used to recruit participants. During year 1, 122 participants (ages 18-86 (N=98), mean= 43.3; SD = 17.36) completed the community training. Their education levels ranged from high school to doctorate. Racial demographics of female participants (78%) were: African Americans (87%), Hispanic/Latino (2%), Caucasian (9%) and Multi-ethnic (2%). Univariate and multivariate analyses were conducted using SPSS version 24.

RESULTS: Health attitude and behavior results established moderate engagement in risk behaviors among the sample. After completing the training, several variables identified an increase in knowledge and awareness of appropriate health behaviors. There were also reductions reported in interest to engage in risky behaviors such as abstaining from condom use and smoking. Overall, participant health knowledge increased from pretest (mean = 5.32, SD = 1.83) to post-test (mean = 6.70; SD = 1.84). The statistically significant difference between these two scores $t(df=110) = 8.33, p < .001$ reflects an increase in preconception health behavior knowledge as well as an increase in positive attitudes about sharing health information.

DISCUSSION/CONCLUSIONS: The findings from this study align with similar studies that demonstrate improved preconception health knowledge and literacy through community-based health interventions (Averill, 2003; Caplan & Cordero, 2015; Dean, Lassi, Iman & Bhutta, 2014; Vanderbilt, Wright, Brewer, Murithi, & Coney, 2016). Our results highlight the continued need for community-based interventions focused on minority populations that provide health knowledge to reduce health-risk behaviors and improve health literacy.

Kouchi, Kathryn, BS

University of Alabama

A Community Partnership to Reduce Hospital Readmissions: An Innovative, Interprofessional Transitions of Care Clinic*Kouchi, Kathryn, BS; Leatherwood, Matthew, MEd; Friend, Mary Louanne, PhD, MN, RN; Elsayed, Tamer, MD, MSc*

PURPOSE: Under the Affordable Care Act, the Hospital Readmission Reduction Program penalizes hospitals with high readmission rates of Medicare patients with several chronic conditions. The University Medical Center (UMC) in Tuscaloosa, AL created a Transitions of Care (TOC) Clinic as a way to engage an interdisciplinary team and community-based approach to foster health among patients and those especially vulnerable to readmission to the hospital.

METHODS: The TOC Clinic is comprised of members from Family Medicine, Nursing, Pharmacy, and Social Work as well as a Dietician. The TOC Clinic met weekly and provided a number of services for each patient including: medication reconciliation, review of discharge summary, follow-up on pending tests and labs, social services (transportation, etc.), community resources utilization, dietitian services, ensure the patient had an appointment with their primary care provider within the next two weeks, and open access 24/7 through an answering service. A retrospective chart review was performed to assess the all-cause readmission rates to the regional hospital for patients with one or more chronic conditions following an initial hospital stay. Readmission in this study was defined as a readmission to a hospital, for any reason, within 30 days of discharge.

RESULTS: The analysis of 82 patients that participated in the TOC Clinic showed a 30-day readmission rate of 13.4% (N=11), which is lower than the national average of 15.6%. Of the 11 patients readmitted to the hospital, 72.7% of the readmissions occurred within one to four days of initial discharge.

DISCUSSION/CONCLUSIONS: With the high proportion of readmissions in this study occurring within a few days of discharge (one to four days) we see a crucial time for intervention with community-based programs such as the TOC Clinic. Within this sample, 60% of patients were discharged with more than six chronic conditions. The patients most likely to be readmitted to the hospital are often very ill. As health policy demands hospitals to address their readmission rates, we may find sustainable solutions with interprofessional and community-based healthcare clinics.

Poster 22

Lindley, Gabrielle K., BS

Poster 23

University of Alabama School of Medicine

Perceptions of Body Image and Preferences for Nutrition Services Among African-American Women Living with HIV

Lindley, Gabrielle K., BS; Willig, Amanda, PhD; Cherrington, Andrea L., MD, MPH; Blake, Ebony; Ward, Dafina, JD; Saag, Michael S., MD

BACKGROUND: African-American (AA) women living with HIV have a life expectancy with treatment comparable to those living without the virus, yet compared to HIV-negative peers experience greater risk of developing nutrition- and obesity-related health complications. Nutrition needs and body size change with HIV infection; however, it is unclear whether living with HIV impacts women's perceptions of health, body size, and nutrition needs.

OBJECTIVE: Our objective was to investigate the potential impact of living with HIV on body image, perceptions of nutritional and/or exercise needs, and desire for lifestyle interventions.

METHODS: In partnership with AIDS Alabama, we conducted focus groups with 35 AA women living with HIV in the Birmingham area. Participants were also administered questionnaires assessing food security, mindful eating practices, and body image.

RESULTS: The median participant age was 52.5 years; 59% had a BMI ≥ 30 (obese), and 21% were diagnosed with diabetes. Overall, the women reported a decrease in HIV-contracting risk behavior following HIV diagnosis, but did not report a change in diet, exercise, or other chronic disease risk behaviors as a result of their positive status. A discrepancy between health perceptions versus actual health practices emerged as a theme among all focus groups. Most women agreed that HIV infection impacted their body shape/size, but did not feel that body size was associated with health outcomes, or that their nutrition needs with HIV were any different than before diagnosis. Several reported dissatisfaction that upon receiving a medical diagnosis such as diabetes they had to make themselves less attractive to attain a body size compatible with metabolic health. In addition, the women emphasized a desire for a broad spectrum of support in the form of formal group sessions led by community health workers, as well as sessions of informal "couch talk," or supportive group dialogue.

CONCLUSION: These findings suggest that despite high risk for obesity and diabetes, AA women with HIV are unaware of changing nutrition needs and metabolic health risks with HIV infection. Further development of effective, educational lifestyle interventions targeted to this demographic living with increased risk for cardiometabolic disorders are needed.

Marques Dos Santos, Isabel C., MD

Poster 24

UAB School of Medicine, Gastrointestinal Surgery

Racial Differences in Health Literacy Among Patients with Inflammatory Bowel Disease

Dos Santos Marques, Isabel C., MD; Liwo, Amandiy, MD, MSPH; Goss, Lauren, MSPH; Baker, Samantha, MD; Richman, Joshua, MD, PhD; Malik, Talha, MD, MSPH; Chu, Daniel, MD

PURPOSE: While well-documented in the primary care settings, the prevalence of low health literacy is not well understood in patients with Inflammatory Bowel Disease (IBD), which includes Crohn's and Ulcerative Colitis. The primary goal of this study is to characterize the prevalence of low health literacy in a contemporary IBD population using three common instruments.

METHODS: Patients with a diagnosis of IBD were recruited from August to January 2018 at a tertiary-referral, minority-serving institution. Patient demographics and social determinants of health were recorded. Health literacy was assessed by trained interviewers during routine clinical visits using three different health literacy measurements: NVS (Newest Vital Sign), REALM-SF (Rapid Estimate of Adult Literacy in Medicine), and S-TOFHLA (Short Test of Functional Health Literacy in Adults). Low health literacy was defined using each test's specified levels. Descriptive statistics along with Chi-Square and t-tests were used to describe the population and for bivariate testing. Statistical comparisons were made using Pearson correlations and generalized linear regression adjusting for age, gender and race.

RESULTS: Of 103 patients assessed, 62% were women and 23% were African-Americans. The mean age was 45 (sd=17.1). Compared to Caucasian-Americans, African-Americans had a higher prevalence of low health literacy by NVS (70 vs. 31%, $p=0.005$) and REALM (54% vs. 10%, $p<0.001$), but not by S-TOFHLA (4% vs. 2%, $p=0.58$). Lower NVS scores were associated with older age and African-American race ($p<0.01$). For REALM-SF, lower scores were associated with being African-American ($p<0.01$), but no association was found with age and gender. Race and age were significantly associated with lower S-TOFHLA scores ($p<0.05$). Patients with private insurance had the highest NVS scores ($p<0.004$), but it was not associated with the S-TOFHLA and REALM.

CONCLUSIONS: Low health literacy exists among IBD patients. Being African-American was associated with higher risk of having low health literacy. Age, gender and insurance status were associated with health literacy levels but varied depending on which literacy instrument was used. These findings demonstrate that assessments of health literacy, which has multiple domains, are highly impacted by the choice of instruments.

McDonough, Ian M., PhD

Poster 25

University of Alabama College of Arts and Sciences, Psychology

The Influence of Comorbid Health Conditions and Racial/Ethnic Differences on Advance Care Planning among Middle-Aged and Older Adults*McDonough, Ian M., PhD; Choi, Shinae, PhD; Kim, Minjung, PhD; Kim, Giyeon, PhD*

OBJECTIVE: Although a national consensus exists on the need to increase the rates of advance care planning for all adults, racial/ethnic differences have not been realized equally. This study investigated racial/ethnic differences in advance care planning and how those differences moderate the association between comorbid health conditions and advance care planning among middle-aged and older adults in the United States.

METHOD: Responses from 8,926 adults from the 2014 Health and Retirement Study were entered into multilevel hierarchical logistic regression analyses to predict advance care planning focused on assigning a durable power of attorney for health care (DPOAHC) and having a written living will after adjusting for covariates.

RESULTS: Comorbid health conditions were positively related to advance care planning. Non-Hispanic Blacks and Hispanics were less likely to have advance care planning than non-Hispanic Whites. Comorbid health conditions had a greater effect for Hispanics than non-Hispanic Whites to be better prepared for their advance care planning through DPOAHC and living will. The initial disparity in advance care planning among Hispanics with no comorbid health conditions decreased as the number of comorbid health conditions increased.

DISCUSSION: Our results suggest that the interaction effect between comorbidity and race/ethnicity on advance care planning may be highlighted to researchers, policymakers, and healthcare professionals to reduce stark racial/ethnic disparities in advance care planning.

Min, Hosik, PhD

Arlington

University of South Alabama College Arts & Humanities,

Patterns and Trends of Health Insurance Coverage on Gulf States by Rural/Urban Areas after Affordable Healthcare Act*Min, Hosik, PhD; Hudson, Kenneth, PhD*

The objectives of this study are 1) to analyze the patterns and trends of the health insurance coverage before and after ACA implementation of the ACA (2009 and 2015) and 2) to estimate the effect of ACA on rural/urban areas for health insurance coverage. Prior research has shown for the United States overall, rural areas benefited more than urban areas. However, there is no prior research that examines the specific effects of the ACA on insurance coverage in the Gulf State region. The logistic regression models were employed as the outcome variable is dichotomous (insurance coverage; yes/no). The results overall rural areas benefited more, yet FL, LA, & TX showed the opposite (urban benefited more).

We estimated an all Gulf States model, but the results were nonsensical and inconsistent. The distinction between rural and urban areas differed by the state government's boundary policy. Some states combined rural areas with an adjacent urban area to increase number of people covered and to reduce the insurance cost by having more patients in a single area. Some states had fewer insurance boundaries/insurance coverage areas (FL, LA, & TX). For instance, FL had a same number of boundaries/areas as counties (67), This explains why urban areas in these states benefited more than urban areas in the other Gulf States. Consequently, we divided the Gulf States region into two areas, AL & MS, and FL, LA, & TX. We also estimated models for the Non-Gulf States.

The logistic regression models include the following independent variables: age, female, nonwhite, marital status, educational attainment, poverty status, labor force status, rural, and ACAYEAR (2015, the year after the ACA implementation of the ACA in 2014). To assess whether or not the effects of the implementation of the ACA on insurance coverage were different for rural and urban areas, we also included an interaction term, rural*ACAYEAR. Two separate models were estimated for each set of states. Non-Gulf states (i.e the rest of the nation). All of the effects were significant and in the expected direction. Rural residents were less likely to have insurance coverage than residents of urban areas. While the ACA increased the odds of insurance coverage overall, the positive effect was less for people living in rural areas.

All coefficients in the two Gulf State models were similar, except the interaction variable. In FL, LA, and TX implementation of the ACA on having insurance coverage was less for those residing in rural areas. However, the effect of the ACA on the odds of having insurance was greater for rural (versus urban) residents of AL and MS. As noted above, the difference between AL and MS versus FL, LA, and TX may be an artifact of the different ways in which urban versus rural boundaries are constructed in the two sets of states.

Moore, Justin X., PhD, MPH

Poster 26

University of St. Louis School of Medicine

Place Matters for Blacks and Hispanics: Mapping Hot Spots of Breast Cancer Mortality in the United States

Moore, Justin X., BA, MPH, PhD; Moore, Justin Xavier, PhD, MPH; Royston, Kendra, BS; Langston, Marvin E, PhD, MPH; Griffin, Russell, PhD, MPH; Hidalgo, Bertha, PhD, MPH; Wang, Henry E, MD, MS; Colditz, Graham, MD, DrPH; Akinyemiju, Tomi, PhD

PURPOSE: The goals of this study were to evaluate geographic and racial/ethnic variation in breast cancer mortality, and evaluate whether observed geographic differences are explained by community characteristics.

METHODS: We analyzed data on breast cancer deaths among women in 3108 contiguous United States (US) counties from years 2000 through 2015. We applied novel geospatial methods and identified hot spot counties based on breast cancer mortality rates. We assessed differences in community characteristics between hot spot and other counties using Wilcoxon rank-sum test and Spearman correlation, and stratified all analysis by race/ethnicity.

RESULTS: Among all women, 80 of 3108 (2.57%) contiguous US counties were deemed hot spots for breast cancer mortality with the majority located in the southern region of the US (72.50%, p value <0.001). In race/ethnicity-specific analyses, NH-Black women resided in 119 (3.83%) hot spot counties, with the majority being located in southern states (98.32%, p value <0.001). Among Hispanic women, there were 83 (2.67%) hot spot counties and the majority was located in the southwest region of the US (southern = 61.45%, western = 33.73%, p value < 0.001). We did not observe definitive geographic patterns in breast cancer mortality for NH-White women. Hot spot counties were more likely to have residents with lower education, lower household income, higher unemployment rates, higher uninsured population, and higher proportion indicating cost as a barrier to medical care.

CONCLUSION: We observed geographic and racial/ethnic disparities in breast cancer mortality: NH-Black and Hispanic breast cancer deaths were more concentrated in southern, lower SES counties.

Niranjan, Soumya

Poster 27

UAB

Role of Implicit Bias in Recruitment of Minority Participants in Cancer Clinical Trials

Niranjan, Soumya J, BPharm., MS; Thomeer, Mieke Beth, PhD; Stepanikova, Irena, PhD; Wolfe, Joseph D, PhD; Bhatia, Smita, MD, MPH; Martin, Michelle Y, PhD; Durant, Raegan W, MD, MPH

PURPOSE: Extensive attention has been paid in recent years to the possibility that implicit bias among health care professionals contributes to health disparities. In its 2003 report, Unequal Treatment, the Institute of Medicine concluded that unrecognized bias against members of a social group, such as racial or ethnic minorities, may affect communication or the care offered to those individuals. However, the role of implicit bias in the context of recruitment of racial and ethnic minorities in cancer clinical trials has not been explored. Therefore, we assessed the perspectives of cancer center clinical and research personnel on their experiences as the factors influencing their recruitment of racial and ethnic minorities for cancer clinical trials.

METHODS: Ninety-one qualitative interviews were conducted at 5 U.S. cancer centers among 4 stakeholder groups: cancer center leaders, principal investigators, referring clinicians and research staff. Interviews were recorded and transcribed. Qualitative data analysis was conducted using a content analysis approach that included a constant comparative method to generate themes from the transcribed textual data. Analyses focused on responses addressing concerns and factors related to minority recruitment for cancer clinical trials.

RESULTS: Four prominent themes emerged from these responses. 1) Communication with minorities is difficult and, therefore, not worth the effort for trial recruitment. 2) Minorities are more likely to be non-compliant so it is not worth approaching them. 3) African Americans are less altruistic and more skeptical of research. 4) Race is irrelevant when screening and recruiting potential minority participants for clinical trials.

CONCLUSION: Implicit biases may be playing a role in perpetuating racial disparities in cancer clinical trial participation.

Nuss, Henry, PhD**Heritage I****LSU School of Public Health****A novel, on-line social marketing campaign increases farmers' market use and fruit and vegetable purchases among supplemental nutrition assistance program participants in an underserved community in New Orleans, Louisiana***Nuss, Henry, PhD; Skizim, Meg, MS; Sothorn, Melinda, PhD*

PURPOSE: Farmers' markets (FMs) have recently been promoted as an effective means to improve fruit and vegetable (F&V) consumption among low-income residents in the United States. However, a lack of awareness of FMs is a potential barrier to FM utilization within low-income, urban communities. The purpose of this pilot and feasibility study was to assess the effectiveness of a novel, internet-based social marketing campaign to increase awareness of farmers' markets among low-income adult residents in the Greater New Orleans area.

METHODS: Supplemental nutrition assistance program (SNAP) participants were recruited in a centrally located Women, Infants and Children center to participate in a six-month, internet-based social marketing campaign, Healthy Roots for You (HRFY). The program was designed to increase awareness of local FMs, the various local, fresh produce offered, and FM purchasing incentives such as the ability to use electronic benefit transfer (EBT) cards and discounts specific to SNAP participants. FM awareness and use were assessed via survey at baseline and six-months at the program's conclusion. On-line content included a program-specific website with information about local FMs, foods available for purchase and food preparation techniques, a private Face Book page which participants could obtain information and share ideas and recipes. Participants also received information and updates via email.

RESULTS: Twenty-four of the original 51 female subjects completed both baseline and end-of-study surveys. Most participants were single (83.3%), African American (n=23), aged 31.1±12.5 years. At baseline, a third (n=8) reported having ever been to a FM and none had purchased fruits and vegetables at a FM. Most did not know FMs accepted EBT (75%) or offered additional SNAP discounts (83%). By six months, nearly three quarters (74%) were aware that FMs accepted EBT. Eighteen participants (75.0%) reported visiting a FM = once (?=6.0, p=.014); half purchased F&V during FM visits. The majority were satisfied/very satisfied (75%) with HRFY and would continue participation if possible (83%).

DISCUSSION/CONCLUSIONS: Healthy Roots for You proved to be both a feasible and successful pilot program which greatly increased FM use, awareness and F&V purchases. Next steps are to expand this program on a wider scale.

Oates, Gabriela, PhD**Centennial I****UAB School of Medicine, Pediatrics****Social Risk Factors and Medication Adherence in Chronic Diseases: Findings from the REGARDS Study***Oates, Gabriela, PhD; Tanner, Rikki, PhD; Stepanikova, Irena, PhD; Howard, Virginia, PhD; Safford, Monika, MD; Muntner, Paul, PhD*

PURPOSE: Low rates of medication adherence have been documented in several chronic diseases. The effect of concentrated social risk on medication adherence has not been investigated. This study tested two hypotheses: (H1) social risk factors - female sex, black race, lower education, lower income, less social support, and higher stress - are associated with lower medication adherence; and (H2) adults with more social risk factors have lower medication adherence.

METHODS: Data were obtained from the REasons for Geographic and Racial Differences in Stroke (REGARDS), a population-based cohort of 30,239 adults aged ≥45 years. This study is a cross-sectional analysis of data collected in the second in-home visit (2014-2016). Medication adherence, assessed with a validated 4-item scale, was dichotomized as high vs low. Social risk factors were defined as female sex, black race, high school education or less, <\$25,000 annual household income, high stress (top quartile of PSS-4), low emotional support, and low instrumental support. Covariates included age, geographic region, self-rated health, depressive symptoms, and history of heart disease, stroke, diabetes, and kidney disease.

RESULTS: Among study participants (N=10,465), 28% reported low medication adherence. They were more likely to be female (p<0.010), in poor self-rated health (p<0.001), and have depressive symptoms (p<0.001), heart disease (p<0.007), stroke (p<0.005), and diabetes (p<0.001). Low medication adherence was associated with low education (p=0.036), low income (p=0.013), low emotional (p<0.001) and instrumental support (p<0.001), and high stress (p<0.001). In a multivariate regression, female sex, black race, low emotional and instrumental support, and high stress remained significantly associated with low adherence. A gradient relationship between the number of social risk factors and medication adherence remained significant in multivariate regression (OR 1.88, 95% CI 1.45-2.44, p<0.000). Compared to participants with 0-2 social risk factors, those with 3-5 and ≥6 risk factors were, respectively, 1.52 and 1.94 times more likely to have low adherence (p<0.01 and p<0.05).

CONCLUSION: Medication adherence decreases with the concentration of social risk factors. These findings can be used to develop risk-stratification tools to identify patients that can benefit from targeted interventions to improve medication adherence.

UAB School of Medicine

Determinants of Smoking Cessation in a National Cohort of Black and White Adults: The Reasons for Geographic and Racial Differences in Stroke

Parekh, Trisha M, DO; Wu, Chengyi, MS; McClure, Leslie A, PhD, MS; Howard, Virginia J., PhD; Cushman, Mary, MD, MSc; Malek, Angela M, PhD, MPH; Harrington, Kathleen F, PhD; Cherrington, Andrea L, MD, MPH; Dransfield, Mark T, MD; Bhatia, Smita, MD, MPH

INTRODUCTION: Cigarette smoking remains the leading cause of preventable disease and death in the US. While awareness of smoking has increased, characteristics associated with successful smoking cessation remain understudied, including potential racial differences.

METHODS: We examined factors associated with successful smoking cessation, and assessed whether the impact of these factors differed by race. We performed a cross-sectional analysis of participants in the population-based REasons for Geographic and Racial Differences in Stroke (REGARDS) cohort, a national, observational survey-based study of stroke risk factors. The current study's cohort consisted of participants who had smoked at least 100 cigarettes in their lifetime. The primary outcome was smoking cessation defined by self-reported "former smoker" status among these participants. Covariates examined in the regression analysis included demographics, comorbidities, and social, economic, and behavioral factors. In addition, we examined the interaction between behavioral factors and race in determining the odds of smoking cessation.

RESULTS: The median age at study was 64.9y (8.99), 53% were males and 59% non-Hispanic whites. Seventy-three percent (n=12,067) self-reported smoking cessation. Factors associated with higher odds of former smoking were older age (OR=1.1, 95%CI, 1.09-1.11), male sex (OR=1.25, 95%CI, 1.08-1.44), higher education (college graduate or higher: OR=1.43, 95% CI, 1.12-1.82), higher income (= \$75,000: OR=1.49, 95%CI, 1.30-2.24) and white race (OR=1.49, 95%CI, 1.28-1.72). Factors associated with lower odds of former smoking were single marital status (OR=0.77, 95%CI, 0.59-1.02), being divorced (OR=0.65, 95%CI, 0.54-0.78), or widowed (OR=0.60, 95%CI 0.49-0.73) compared with those who were married. Frequent exercise (>3x/week: OR=1.29, 95%CI, 1.13-1.46), adherence to Mediterranean diet (medium: OR=1.42, 95%CI, 1.24-1.64; high: OR=2.01, 95%CI, 1.75-2.51), daily television viewing time (referent group: 4h; <1h: OR=1.37, 95%CI, 1.13-1.66), and abstinence from alcohol use (OR=1.45, 95%CI, 1.13-1.86) were associated with higher odds of smoking cessation. A significant interaction was observed between race and behavioral factors, such that African American participants had higher odds of smoking cessation if they were abstinent from alcohol (OR=2.27, 95%CI, 1.42-3.62), whereas the relationship between abstinence from alcohol and smoking cessation in whites was not statistically significant (OR=1.18, 95%CI, 0.88-1.57).

CONCLUSION: Smoking cessation is influenced by economic, social, and behavioral factors. Efforts to promote tobacco cessation should consist of multi-dimensional, yet targeted interventions on individual, community, and environmental levels.

UAB School of Nursing

Health education materials: Where are the patients?

PURPOSE: Inadequate health literacy is a barrier to positive health outcomes and often leads to increased hospital readmissions. Congestive heart failure patients are among the top populations with the tendency to be readmitted to the hospital within 30 days of being discharged. African American females represent a particular population with a significant number being affected by cardiovascular disease.

METHODS: A general qualitative research approach utilizing a semi-structured interview was used to investigate the perceptions that African American adult female patients diagnosed with congestive heart failure have of the healthcare materials that they receive or if there are other factors that influence the discharge process. The post discharge interviews allowed participants the opportunity to provide detailed personal accounts of their experiences of receiving written healthcare materials in the hospital setting, as well as the discharge process as a whole.

RESULTS: Results showed that three key factors were identified as influential in the discharge process: 1) consumer-friendly information and materials; 2) humanization; and 3) expertise of the health care team. Consumer-friendly information and materials included readability and comprehensiveness. Humanization included the health care providers showing patience, patient-centered care and personal touch. Expertise of the health care team included exhibiting professionalism and effective communication skills.

CONCLUSION: Providing patients with consumer-friendly health care education materials at an appropriate literacy level is one factor affecting the discharge process. Relationship building and communication skills were factors other than the materials that positively influenced the patients' perceptions of the discharge process and fostered knowledge transfer from health care provider to patient.

Puccinelli, Michael, MS

Poster 29

UAB School of Medicine

Inadequate Intake of Dietary Protein and Micronutrients Among Older Adults with HIV*Puccinelli, Michael, MS; Overton, E. Turner, MD; Rodriguez, Martin, MD; Morrow, Casey D., PhD; Willig, Amanda L., PhD*

PURPOSE: Diet-related comorbidities have become the main medical concerns for many people living with HIV (PLWH) around the world. In addition to needing greater protein and micronutrients than HIV-uninfected individuals, further dietary challenges occur with aging. These include a required increase in nutrient density but decreased need for total calories. Due to improvements in HIV therapy, the life expectancy of PLWH has increased globally thus highlighting the need for a quality diet throughout life. Understanding the dietary intake of older PLWH (defined as ≥ 50 years) is necessary to minimize the burden of comorbid conditions. This study aims to assess the dietary intake and diet quality of adults over age 50 living with HIV.

METHODS: Sixty PLWH aged ≥ 50 years living in Birmingham, AL completed three 24-hour dietary recalls and demographic surveys. Average intake was compared to the Dietary Guidelines for Americans 2015-2020. Alternate Healthy Eating Index-2010 was used to compute diet quality score. The association of demographic factors with dietary intake was assessed with spearman correlations and linear regression.

RESULTS: On average, participants were 54.5 years old, 68% men, 80% minority, 38% obese, and 55% food insecure. Only 42% met dietary protein recommendations of 1.2 g/kg body weight/day, while only 40% met recommendations for total calories and fat. Only 10% consumed adequate dietary fiber, with similarly poor micronutrient intake: calcium (18%), Vitamin D (0%), folate (48%), and Vitamin C (47%). Median AHEI-2010 score was 45.5 (range 26.6-87.0). Better food security and normal body weight were not associated with improved protein or micronutrient intake, or AHEI-2010. Men were more likely than women to meet goals for carbohydrate (66% vs. 32%; $p=0.01$) and folate (61% vs. 21%; $p=0.005$) intake.

DISCUSSION/CONCLUSIONS: We identified universally poor dietary intake in older PLWH, in particular inadequate intake of dietary protein, fiber, and Vitamin D. These results highlight the need for improved communication of how dietary recommendations change with aging and HIV diagnosis as well as tangible ways to assist aging PLWH in meeting dietary needs.

Reed, Rhiannon D., MPH

Arlington

UAB School of Medicine, Department: Surgery

Geographic Disparities in Rates of End-Stage Renal Disease and Organ Supply in Gulf States Compared to Non-Gulf States*Reed, Rhiannon D., MPH; Shelton, Brittany A., MPH; Mustian, Margaux N., MD; MacLennan, Paul A., PhD; Sawinski, Deirdre, MD; Locke, Jayme E., MD, MPH, FACS*

PURPOSE: Organ Procurement Organizations are responsible for procuring and allocating organs for transplantation from deceased donors in Donation Service Areas (DSAs). The Final Rule prohibits geographic disparities in access to organs, but the current kidney allocation system does not account for potential supply based on disease burden and other population characteristics within DSAs. As such, regions with traditionally high rates of comorbid disease, such as the Gulf States region, may be disadvantaged if local supply is limited.

METHODS: Using data from the 2016 Robert Wood Johnson Foundation County Health Rankings, the Scientific Registry of Transplant Recipients public reports, and the United States Renal Data System, we compared comorbid disease prevalence, rates of end-stage renal disease (ESRD), and expected organ donation rates by Gulf States location.

RESULTS: Prevalence of African American ethnicity, diabetes, fair/poor self-rated health, physical inactivity, food insecurity, and uninsurance were higher among DSAs in the Gulf States region vs. non-Gulf States. Conversely, the prevalence of non-Hispanic White ethnicity, college education, and median household income were higher among non-Gulf States. The rate of ESRD varied by DSA, ranging from < 162 cases per 100,000 to > 225 cases per 100,000. Median rate of ESRD was 214.4 per 100,000 among DSAs in the Gulf States, vs. 187.1 per 100,000 in the non-Gulf States ($p=0.003$). Expected rate of organ donation per 100 eligible deaths was 71.1 in Gulf States and 75.4 in non-Gulf States ($p=0.01$).

CONCLUSION: Higher rates of ESRD were observed in the Gulf States region, suggesting a greater need for organs than non-Gulf States. However, fewer donors were estimated in Gulf States, likely due to high comorbid disease burden, compared to non-Gulf States. These data suggest the need to examine allocation policy to prevent geographic disparities in access to transplantation.

Royston, Kendra J., PhD

Poster 30

UAB College of Arts and Sciences, Biology

Epigenetic Impact of Combinatorial Sulforaphane and Withaferin A on Breast Cancer Cells

Royston, Kendra J., PhD; Paul, Bidisha, BS; Tollefsbol, T.O., PhD, DO

PURPOSE: The human diet consists of a multitude of foods, thus the need to elucidate how certain compounds interact in collaboration is a much-needed area of examination that will advance the field. The need for a universal treatment that is effective indiscriminately in both ER positive and triple negative breast cancers is apparent. Withaferin A (WA) and sulforaphane (SFN) are two epigenetic modifying compounds that have only recently been studied in conjunction. SFN, found in cruciferous vegetables, has been documented to promote breast cancer cell death and down-regulate aberrant expression of histone deacetylases (HDACs). The inhibition of HDACs provides a more open chromatin structure which enables certain transcription factors to bind appropriately leading to the activation of tumor suppressor genes. WA, found in the Indian winter cherry, is a potent inhibitor of angiogenesis and regulator of inflammatory cytokines. WA has been shown to control epigenetic mechanisms in part through the inhibition of DNA methyltransferases (DNMTs). The use of DNMT and HDAC inhibitors to reverse the malignant expression of certain genes in breast cancer has shown much promise.

METHODS: We utilized the breast cancer cell lines MDA-MB-231 and MCF-7, which are triple negative and ERα (+) respectively, to assess cell cycle progression using flow cytometry. Further, we evaluated mRNA expression of cell cycle genes using quantitative real time PCR. And finally, we utilized ELISA to assess overall enzymatic activity of both histone methyltransferases (HMT) and histone acetyltransferases.

RESULTS: We have found that SFN+WA synergistically promote breast cancer cell death and regulate cell cycle progression by preventing transition into G2 phase. Preliminary results also demonstrate that this unique combination of epigenetic modifying compounds is capable of down-regulating Cyclin D1 and CDK4 while up-regulating E2F mRNA expression. Lastly, we report the modulation of both HMT and HAT activity.

DISCUSSION/ CONCLUSION: We believe breast cancer cell death via SFN+WA may be attributed to the regulation of epigenetic modulators, as shown through HAT and HMT activity assays, thus inhibiting the hyper-methylation and hypo-acetylation of the promoter region of certain tumor suppressors. Future studies will determine global changes in DNA methylation and examine the promoter region of relevant tumor suppressors.

Rung, Ariane, MPH, PhD

Heritage I

LSU School of Public Health, Epidemiology

Feasibility of Using a Smartphone-Based Mindfulness Meditation App to Increase Mindfulness in a Population of Women

Rung, Ariane, MPH, PhD; Berghammer, Lara; Bronson, Megan, MPH; Peters, Edward S., DMD, SM, ScD

PURPOSE: To describe the feasibility of using a mindfulness-based meditation application to increase mindfulness within an existing cohort of women in coastal Louisiana.

METHODS: 1376 women from the Women and Their Children's Health (WaTCH) Study who had previously supplied their email addresses were invited by email to participate in an online mindfulness study. Demographic and health information were collected via online survey. Upon completion, women received a link to download Headspace™, a smartphone-based mindfulness intervention app. Online follow-up surveys were administered 45 days later. Several email reminders were sent at each step of the data collection process. Mindfulness was measured with the trait Mindful Attention Awareness Scale (MAAS). Depression was measured with the Center for Epidemiological Studies Depression Scale (CESD-10) and perceived stress was measured through the Perceived Stress Scale (PSS-4). Body Mass Index (BMI) was calculated from self-reported height and weight.

RESULTS: Enrollment and data collection were completed on February 5, 2018. Of the 1376 women invited to participate, 523 completed the baseline survey (38% response rate), 326 consented to the Headspace™ mindfulness intervention (62% uptake rate), and approximately 230 completed the follow-up survey (71% retention rate). Participants were married (60%), currently employed full-time (57%), had a current household income under \$50,000/yr (52%), and were parents of minor children (54%). 46% of subjects reported symptoms of depression. Mean perceived stress score was 6.25 (SD 3.36), and 59% were obese. Average mindfulness score was 4.16 (SD 1.04), with higher scores reflective of higher levels of mindfulness; average scores were similar to norms for community adults. Higher baseline mindfulness scores were associated with lower stress levels, less depression, lower BMI, being single, and not being a parent of a minor child.

DISCUSSION: Given that future data collection efforts for research are trending toward online and electronic delivery methods, it is important to understand its use in a population of community-dwelling women. Our results show that online data collection is a feasible method for capturing data from this population, however low participation rates suggest that more effort is required to understand how best to utilize these techniques.

Schoenberger, Yu-Mei, PhD

UAB School of Medicine, Preventive Medicine

Using Descriptive Findings from a Survey Jointly Administered by an Academic-Community Health Coalition to Plan Future Health Interventions

Schoenberger, Yu-Mei M., PhD; Bateman, Lori Brand, PhD; Osborne, Tiffany, BA; Hawk, Bianca, MSW, MPH; Bae, Sejong, PhD; Eady, Sequoya, MPH; Thompson, Joanice, BS; Brantley, Wendy, BS; Crawford, Lovie, BS; Fouad, Mona N., MD, MPH

PURPOSE: The purpose of this research is to describe the process of building a community coalition-academic team using community-based participatory research (CBPR) and then together conducting an assessment of neighborhood perceptions and cohesion to guide the design of locally relevant health initiatives.

METHODS: A partnership was established, based on CBPR principles, between an academic center and a local, urban, underserved neighborhood in Birmingham, Alabama to identify and address community concerns and priorities. Academic and community members who were part of the coalition worked together to design and conduct a cross-sectional survey among community residents (N=90) in September of 2016 to examine perceptions of neighborhood characteristics, including social cohesion and neighborhood problems.

RESULTS: The major concerns voiced by the coalition were violence and lack of neighborhood cohesion and safety. The community survey verified the concerns of the coalition, with the majority of participants mentioning increasing safety and stopping the violence as both the things to change about the community and the things offered the greatest hope for the community. Survey results indicated residents had a moderate level of perceived social cohesion (mean = 2.87 [0.67]).

DISCUSSION/CONCLUSIONS: The Academic and Community Engagement (ACE) Core of the Mid-South Transdisciplinary Center for Health Disparities Research successfully partnered with community members and stakeholders to establish a coalition whose concerns and vision for the community matched the concerns of residents of the community. Collecting data from diverse sources allowed for a rich understanding of neighborhood concerns. This data is currently being used by the coalition to design relevant health interventions that have the potential to impact their community.

Scott, Jennifer, DrPH

Centennial II

LSU Social Work

Alcohol outlets as an indicator of the health risks of segregation

Scott, Jennifer, PhD; Danos, Denise, PhD; Collins, Robert, PhD; Simonson, Neil, PhD; Leonardi, Claudia, PhD; Scribner, Richard, PhD

PURPOSE: Residential segregation by race/ethnicity is associated with increased risk of mortality, particularly for black residents. Initially hypotheses connected segregated neighborhoods to negative outcomes through social structures. More recent considerations focus on the role of the neighborhood physical environment. Overconcentration of liquor outlets has long been recognized as a risk factor for negative health outcomes, associated with neighborhood-level outcomes including violence, motor vehicle crashes, and liver conditions. We aim to demonstrate that segregated neighborhoods with a greater than area average concentration of minority residents are associated with increased contextual risk (i.e., overconcentration of liquor outlets) for negative health outcomes.

METHODS: Alcohol outlet addresses for the year 2014 were obtained from the Alabama Alcoholic Beverage Control Board and the Louisiana Office of Alcohol and Tobacco. Outlets were geocoded to 2010 census tracts and merged with American Community Survey (ACS) 2010-2014 5-year estimates of population and socioeconomic indicators. Local alcohol control policy was obtained from state regulatory agencies. Black isolation was calculated at the county level to operationalize area residential segregation. Multilevel generalized linear models were used to investigate correlates of off-sale outlet density. All models were fit using the Glimmix procedure in SAS v 9.4.

RESULTS: We found a positive association between black isolation and outlet density. Within a county, tracts with a greater share of black residents had significantly higher outlet density. A single standard deviation increase in the percentage of black residents was associated with 12% [1.12 (1.09, 1.15)] increase in outlet density in wet counties but a 44% [1.44 (1.34, 1.54)] increase in dry counties. Further, we found that tract racial composition remained significantly associated with outlet density in damp counties even after controlling for poverty.

CONCLUSION: Neighborhoods with a greater share of black residents are more likely to have an overconcentration of liquor outlets, an important indicator of negative health outcomes. Future research will help more explicitly understand the links between segregation and specific health outcomes. Additionally, investigations exploring how county and city-level policies impact these relationships and spatial relationships between outlets and health outcomes will further improve our understanding of the impact of neighborhood segregation on health.

How Did The Patient Protection & Affordable Care Act Impact Health Disparities Within the Gulf States, and Between Gulf States and Rest of the Nation?

Sen, Bisakha, PhD; Joseph, Reena, MHA; Pisu, Maria, PhD

PURPOSE: Studies have shown that the implementation of the Patient Protection and Affordable Care Act (ACA) is associated with improvement in self-reported insurance coverage and healthcare access. There is also evidence that ACA benefitted minorities and reduced health disparities. At the same time, there are indications that effects of ACA varied from region to region. This study is the result of a pilot project specifically to consider the impact of ACA on the Gulf States — Florida, Alabama, Mississippi, Louisiana, and Texas. On average, they have poorer health outcomes compared to the rest of the country. Additionally, their political climate may have influenced attitudes towards ACA, and only Louisiana has expanded Medicaid to low-income adults.

METHODS: Data from the Behavioral Risk Factor Surveillance System (BRFSS), 2011-2015, is used. This annual telephone survey conducted by the Centers for Disease Control & prevention collects data on socio- demographic characteristics, health insurance and access, risky behaviors, and self-assessed health for individuals from all 50 states and the District of Columbia. Multivariate regression analyses and a ‘difference in difference’ framework are used to investigate how (1) health outcomes and health disparities changed within these states after ACA; (2) how these changes compared to the rest of the U.S.

RESULTS: Health insurance coverage and access improved significantly in the Gulf States after ACA. Disparities between Hispanics and non-Hispanic whites were reduced more sharply in Gulf States than rest of the nation. However, disparities between high and low-income groups did not shrink to the same extent as the rest of the nation.

DISCUSSION/CONCLUSION: ACA benefitted Gulf States’ populations, and dismantling or shrinking the program will likely worsen their health outcomes. At the same time, Gulf States may potentially shrink income disparities in health if they more widely adopt the Medicaid expansion provision in ACA.

Maternal Stress Contributes to Childhood Infectious Diseases: Evidence from the Czech Republic

Stepanikova, Irena, PhD; Oates, Gabriela, PhD; Thon, Vojtech, MD, PhD; Kukla, Lubomir, MD, PhD; Svancara, Jan

PURPOSE: There is evidence of transmission of stress-related dysregulation from parents to offspring during early developmental stages, leading to adverse health outcomes. This study investigates whether perinatal stress is linked to the risk of infectious diseases in children aged 7-11 years. We hypothesize that stress exposure during pregnancy and the first 6 months after birth independently predict common infectious diseases.

METHODS: Data are obtained from ELSPAC-CZ, a prospective birth cohort. Maternal stress, operationalized as the number of life events, is examined for pregnancy and the first 6 months postpartum. Children’s diseases include eye infection, ear infection, bronchitis/lung infection, laryngitis, strep throat, cold sores, and flu/flu-like infection.

RESULTS: More prenatal and postnatal life events are both linked to a higher number of infectious diseases between the ages of 7-11 years. The effect is larger for postnatal vs. prenatal events, and the effect of prenatal events is fully explained after maternal health in pregnancy is controlled.

DISCUSSION/CONCLUSIONS: Perinatal stress is linked to susceptibility to infectious diseases in school-age children. Compared to life events during pregnancy, events during the first 6 months have a larger and more consistent effect. Interventions to address stress in pregnant and postpartum women may benefit long-term children’s health.

Szaflarski, Magdalena, PhD

UAB College Arts & Humanities, Sociology

Discrimination Effects on Immigrant and Refugee Health and Well-being*Szaflarski, Magdalena, PhD; Bauldry, Shawn, PhD*

PURPOSE: Discrimination has been identified as a major stressor and influence on immigrant health. This study examined the role of perceived discrimination in relation to other factors, in particular, acculturation, in mental and physical health of immigrants and refugees.

METHODS: Data for US adults (18+ years) were derived from the National Epidemiologic Survey on Alcohol and Related Conditions. Mental and physical health was assessed with the Medical Outcomes Study Short Form-12 Version 2 (SF-12v2). Acculturation and perceived discrimination were assessed with multidimensional measures. Structural equation models were used to estimate the effects of acculturation, stressful life effects, perceived discrimination, and social support on mental and physical health among immigrants and refugees.

RESULTS: Among first-generation immigrants, discrimination in health care had a negative association with physical health while discrimination in general had a negative association with mental health. Social support had positive associations with physical and mental health and mediated the association of discrimination to health. There were no significant associations between discrimination and health among refugees, but the direction and magnitude of associations were similar to those for first-generation immigrants.

DISCUSSION/CONCLUSIONS: This study used multidimensional measures of health, perceived discrimination, and acculturation to examine the pathways between key social/psychosocial factors in health of immigrants and refugees at the national level. This study included possibly the largest national sample of refugees. Still, we could not detect statistically significant associations between discrimination and refugee health, possibly due to insufficient sample size. Further research using larger samples of refugees and testing moderating effects of key social/psychosocial variables on immigrant health outcomes is warranted. Efforts aiming at reducing discrimination and enhancing integration/social support for immigrants are likely to help with maintaining and protecting immigrants' health and well-being.

Walker, Victoria, MPH**Poster 31**

Mississippi Department of Health

"Test to Protect Family and Self": A Hepatitis B Project in the Vietnamese Communities of Harrison, Hancock, and Jackson Counties in Mississippi*Walker, Victoria, MPH; Funchess, Tanya, DHA, MPH, MSM; Ainsworth, Gail, RN, BSN; Mitchell, Jill; Phan, Xuan; Nguyen, Kiet; Nguyen, Jane; Tran, Ginni; Egressy, Julie; Le, Daniel; Wilson, Greg*

PURPOSE: It is estimated that 1 in 12 Asian-Americans and Pacific Islanders (AAPI) are living with undiagnosed hepatitis B, accounting for over half of the 1.2 million Americans living with the disease. Approximately 15-25 % of people living with chronic hepatitis develop serious liver damage, including liver cancer. Nearly two-thirds of Americans living with chronic hepatitis B do not know they are infected. The Mississippi Gulf Coast is home to approximately 8,500 Vietnamese Americans. Vietnam has a chronic hepatitis B prevalence of =8%. Financial barriers and language barriers hinder many of the Vietnamese Americans of the Mississippi Gulf Coast from accessing health services. In addition, cultural values and beliefs about disease also prevent Vietnamese Americans from seeking proper care.

METHODS: A community advisory board (CAB) comprised of regional health department staff, a federal qualified health center, and community organizations convene to provide a comprehensive Hepatitis B program composed of education, screening, and linkage to service for the Vietnamese community of the MS Gulf Coast. Hepatitis B screening and result sessions are held at local spots in the community. Each participant has the opportunity to sign up for follow-up services with bilingual community health workers to navigate the healthcare system.

RESULTS: 292 Vietnamese Americans have been screened since the program's inception. Of those screened 7.2% (n=21) have chronic infection, 45.5% (n=133) are immune by infection, 16.4% (n=48) are immune by vaccination, 14.4% (n=42) need further testing, and 16.4% (n=48) need vaccination. Of those eligible for the follow-up program (n=111), 59.5% signed up for services. Of those needing vaccination (n=48), 10.4% (n=5) have completed the series and 56.3% (n=27) have had at least their first shot.

DISCUSSION/CONCLUSIONS: Health promotion and prevention programs aimed at improving health disparities in minority populations must take into consideration the local and historical context of the community. A robust community advisory board of diverse members can guide activities for successful implementation, provide solutions to challenges and barriers, and develop innovative strategies to engage the community.

Wang, Zhixin, MS

Poster 32

UAB School of Medicine

Regional Disparities in Ovarian Cancer in the United States

Wang, Zhixin, MS; Dilley, Sarah, MD; Bartolucci, Alfred A., PhD; Bae, Sejong, PhD

PURPOSE: Ovarian cancer (OC) is the fifth leading cause of cancer death among women in the United States. Despite the overall decrease in incidence and mortality rates, disparities in OC persist in the United States. Compared to racial disparities, regional disparities in OC were scarcely studied. The aim of this study was to expand our knowledge of regional disparities in OC in the United States.

METHODS: 43,637 women (non-Hispanic white and non-Hispanic black) diagnosed with OC (2000-2014) were identified from the Surveillance, Epidemiology, and End Results (SEER) 18 Program. To study regional disparities, 18 registries were divided into two groups: South (Louisiana; Metropolitan Atlanta, Georgia; Rural Georgia; and Greater Georgia) and US14 (registries not in the South region). Chi-Squared tests, Sidak adjusted log-rank test, logistic regression model and Cox proportional hazards model were performed. Rates and analyses were done by SEER*STAT and SAS 9.2.

RESULTS: The South region had a lower incidence rate than the US14 region (12.0 vs. 13.4 per100,000), and a lower 5-year observed survival rate (37.5% vs. 39.8%), 2000-2014. Women in the South region had a lower insurance rate (2.7% vs. 6.6%, $p < 0.0001$), and surgery rate (73.4% vs. 76.2%, $p < 0.0001$). White women in the US14 region had the best overall survival, compared to white women in the South region, and black women in both regions ($p < 0.0001$). Adjusted for age, cancer stage, surgery and insurance, women in the South were 1.4 times more likely to die after five years of diagnosis (OR= 1.4, 95% CI: 1.2-1.6). In addition, women in the South had higher hazard ratios of death in multiple age groups: 2.6 (95% CI: 1.4-4.9) times higher in age group 20-34, 1.5 (95% CI: 1.2-1.8) in age group 45-54, 1.4 (95% CI: 1.2-1.6) in age group 75-84, and 1.3 (95% CI: 1.1-1.7) in age group 84 and older, adjusted for cancer stage, surgery and insurance.

DISCUSSION/CONCLUSIONS: This is the first study to document the regional disparities between the South and US14 region in OC in the United States. Both black and white women in the South region had disadvantaged survival compared to women in the US14 region.

Washington, Teneasha, MPH

Poster 33

UAB School of Health Professions

Adapting Evidence-Based Health Programs for Individuals with Disabilities

Washington, Teneasha, MPH

PURPOSE: Obesity rates for children ages 2-17 with disabilities are 38% higher than for children without a disability. Moreover, children with developmental disabilities and mobility limitations may be more susceptible to obesity related risk factors (i.e., nutrition and physical activity) compared to individuals without disabilities. Despite the significance, there are limited inclusive evidence-based programs. The purpose of this study was to adapt the Brief Motivational Interviewing (BMI²) program to make it more inclusive for individuals with disabilities utilizing the National Center on Health Physical Activity and Disability's (NCHPAD) Knowledge Adaptation, Translation, and Scale-up (N-KATS) and The Guidelines, Recommendations and Adaptations Including Disability (GRAIDs) Domain Framework.

METHODS: The BMI² was identified as an evidence-based health program and was reviewed for disability inclusion. The expert information specialist then applied the GRAID Domain Framework to the curriculum to identify the specific areas where adaptations were needed. After the inclusion gaps were identified, the specific adaptations needed to address the gaps were chosen or developed using a triangulation of grey or white literature, advisory panel, and disability stakeholder feedback.

RESULTS: The BMI² was identified and adapted based upon the assessed GRAID Domain Framework. To facilitate dissemination efforts, NCHPAD is utilizing an adapted version of the CAN-IMPLEMENT Process evidence-based model. Future efforts include facilitating the practice of inclusion in organizations and communities utilizing the Agency for Healthcare Research and Quality's 10 dissemination efforts and offering ongoing technical assistance to implement and adapt future programs.

DISCUSSION/CONCLUSION: There is a need for health program implementers to partner with disability researchers to adapt programs to be inclusive of individuals with disabilities. NCHPAD has developed several resources to assist in creating more inclusive communities.

Wells, Rachel, MSN

Poster 34

UAB School of Nursing, Adult; Acute & Chronic Continuing Care

East Coast Divide: Results of the ENABLE CHF-PC Early, Concurrent Palliative Care Heart Failure Pilot Clinical Trial

Wells, Rachel, BA, BS, MSN; Dionne-Odom, J. Nicholas PhD, RN; Ejem, Deborah, PhD; Kvale, Elizabeth, MD, MSPH; Bakitas, Marie, DNSc

PURPOSE: Guidelines recommend palliative care (PC) for individuals with advanced heart failure (HF). ENABLE CHF-PC (Educate, Nurture, Advise, Before Life Ends Comprehensive Heart care for Patients and Caregivers), a telehealth PC intervention, was developed to increase PC access to medically-underserved/rural HF patient and caregiver dyads.

DESIGN METHODS: ENABLE CHF-PC was piloted at two sites in the North- and Southeast U.S. (4/1/14-8/31/15). Eligibility criteria included: Class III/IV or Stage C/D HF and age>50 years. Patients and caregivers received an in-person PC consultation, nurse coach phone sessions (patients: 6 sessions; caregivers: 4 sessions), and monthly check-in calls. Quality of life (QOL), physical/mental health, symptom, and burden outcomes were collected at baseline, 12 and 24 weeks.

RESULTS: Sixty-one patients (Northeast=32; Southeast=29) and 48 caregivers (Northeast=29; Southeast=19) were enrolled. HF patients averaged 70.6 years and were mostly female (49.2%) and white (80.3%); caregivers averaged 64.9 years and were mostly female (81.3%) and white (83.3%). Most patients (69%) and caregivers (79%) completed all intervention sessions; however, there were between-site differences in measurement completion (Northeast=72% vs. Southeast=38%). Moderate effect-size improvements were noted for patient QOL, symptoms, physical and mental health in patients and caregiver QOL, mental health and burden. While both sites reached recruitment goals, challenges included participants' limited understanding of PC, dyads' issues in keeping scheduled data and invention calls, recruitment learning curve, and health literacy barriers.

CONCLUSIONS: Lessons learned from pilot-testing ENABLE CHF-PC facilitated refinement of strategies to recruit and retain literacy-challenged advanced HF dyads, which have been incorporated in an ongoing efficacy trial of ENABLE CHF-PC.

Wen, Huacong, MS

Poster 35

UAB School of Health Professions, Physical Therapy

Racial/Ethnic Differences in Obesity in Individuals with Spinal Cord Injury: The Impact of Disadvantaged Neighborhood

Wen, Huacong, MS; Chen, Yuying, MD, PhD; Botticello, Amanda L., PhD, MPH; Bae, Sejong, PhD

PURPOSE: To examine the role of neighborhood in the relationship between race and obesity in people with spinal cord injury (SCI).

RESEARCH DESIGN: A cross-sectional analysis of survey data from National SCI Database linked with neighborhood data from American Community Survey (ACS) by Census tract

PARTICIPANTS: 3,129 participants (men, 79.2%; mean age, 44.2 ± 15.5y; tetraplegia, 37.7%; complete injury, 44.7%; mean duration of injury, 8.3 ± 9.7y) who completed a follow-up assessment during 2006 - 2016 and resided in 2,739 Census tracts.

METHODS: Participants were divided into 3 groups: non-Hispanic white (N=2,101), non-Hispanic black (N=693), and Hispanic (N=335). Obesity was defined as a body mass index ≥ 30.0 kg/m² at the follow-up assessment. Neighborhood was represented by concentrated disadvantaged index (CDI). CDI was a composite index derived from 6 Census tract level variables summarizing 2008-2012 ACS data. According to the quartiles of CDI, there were 4 neighborhood groups (minimal, low, moderate and high disadvantaged neighborhood). Logistic regression was used to estimate odds ratio (OR) of being obese in non-Hispanic black and Hispanic relative to non-Hispanic white, after controlling for demographic, injury-related and neighborhood factors.

RESULTS: of 3,129 participants, 23.3 % were obese. Hispanics had the greatest obesity prevalence (30.5%), followed by non-Hispanic blacks (23.5%) and non-Hispanic whites (22.0%; p= .003). After controlling for demographic and injury-related factors, Hispanics were 64.0% more likely to be obese relative to non-Hispanic whites (OR, 1.64; 95% CI, 1.2-2.2). After further adjusting neighborhood differences, OR of being obese in Hispanics relative to non-Hispanic whites reduced (OR, 1.47; 95% CI, 1.1-2.0). However, there was no significant difference in obesity between non-Hispanic blacks and non-Hispanic whites. Regardless of racial groups, the odds of being obese for people with SCI from the high disadvantaged neighborhood was nearly twice than those from the minimal disadvantaged neighborhood (OR, 1.9; 95% CI, 1.4-2.5).

CONCLUSION: Hispanics are more likely to be obese than other racial groups in the SCI population. To address neighborhood disadvantages might mitigate the difference in obesity between non-Hispanic whites and Hispanics. Environmental factors should be considered while investigating racial differences in obesity in the SCI population.

Wilson, Craig M., MD

Heritage I

UAB School of Public Health, Epidemiology

Impacting the HIV Continuum of Care for Domestic Youth through Community Coalition Driven Structural Change Objectives

PURPOSE: The domestic HIV epidemic continues to most heavily impact racial and ethnic minority youth, particularly men who have sex with men (MSM). The ATN established community coalitions in 15 US cities starting in 2003 based on a Community Empowerment Framework. Coalitions actively guided structural change objectives (SCO's) targeting impediments to HIV prevention and treatment in their respective communities. Challenges remained with HIV testing and linkage to care for youth in all communities.

METHODS: Formal collaborations were established with CDC in 2009 for HIV testing and linkage to care initiatives targeting youth with additional support from ARRA funding in 2010 (SMILE Protocol). These activities were facilitated by establishing direct linkages with local Public Health Departments. Ultimately these activities were linked more closely with our ATN C2P coalitions to further enhance linkage and engagement in care by addressing local structural barriers (SMILE 2 Protocol). With support from the congressional Minority AIDS Initiative, these activities were further extended to include separate HRSA supported clinics. With supplemental support from NIMHD in 2015, block grants for proposed community driven testing initiatives (C2TaP Protocol) allowed for assessment of HIV testing approaches.

RESULTS: Through the activities of the SMILE programs over 2100 youth were identified as HIV+ and over 70% were linked to care by 2012 which was up from a mean of about 40% in 2010. Through the activities of the SMILE 2 program (Oct 2012 - Aug 2015) an additional 2230 youth were identified with 78% linked to care (range 57-90%) with near 90% engaged in care, including at HRSA sites. All coalitions established SCO's targeting testing and linkage to care challenges and 177 new SCO's were completed (344 initiated) by September 2015. Through the C2TaP Program, an additional 2400 youth were HIV tested over 10 months and the highest yields of HIV+ youth were found (6.3% vs 0.1%) with targeted testing strategies vs universal testing strategies. Highest rates of linkages to prevention services (85% vs 30%) were also found with targeted testing strategies.

CONCLUSIONS: Having established community coalitions actively pursuing SCO's targeting youth at risk or infected with HIV allowed for productive integration of activities directed at improving HIV continuum of care outcomes for ethnic/racial minority youth in 15 cities. These relationships also allowed for over-layering of FDA licensing trials for HIV biomedical prevention approaches (Truvada PrEP and dapivirine ring).

Wise, Jenni, RN, MSN

Poster 36

UAB School of Nursing

Feasibility and Acceptability of a Community-Based Participatory Research Program to Increase Health Screening for HIV, HCV, and Colorectal Cancer in African American Men

Wise, Jenni M., RN, MSN; Ott, Corilyn, PhD; Footman, Alison, P., MSN; Araya, Brook Y.; Hardy, Claudia, MPA; Walker, Cordia; Latham, Charles; Stockett, Romeo, PhD; Daniels, George, PhD; Alexander, Mark, PhD, Lanzi, Robin G., PhD, MPH; & Kempf, Mirjam-Colette, PhD, MPH

PURPOSE: African American (AA) males are disproportionately affected by HIV, HCV, and colorectal cancer. To increase screening and linkage to care in this population, socio-cultural variables hindering early detection and treatment must be addressed. Community-based participatory research (CBPR) has demonstrated increased effectiveness in reaching mutually established goals by providing greater insight into the root social and political injustices influencing health disparities in communities. In this study, we sought to explore the feasibility, acceptability, and socio-political considerations necessary to launch and maintain a CBPR program in one rural community in Mississippi.

METHODS: Semi-structured focus groups (N=2) with key community informants (N=18) enhanced our understanding of socio-political factors, community needs, and logistical considerations necessary for successful program development and maintenance. Knowledge gained from initial focus groups guided the development of CBRP program infrastructure and curriculum to reduce HIV, HCV, and colorectal cancer health disparities among AA men. The developed CBPR program was presented to original focus group members (N=9) to elicit further feedback.

RESULTS: Focus group participants were AA and predominantly males (67%) age 50 or older (67%). Descriptive and thematic analyses of initial focus groups resulted in emergence of three themes: 1) Ignorance must be replaced by knowledge; 2) Community advocates are well suited to produce change due to their innate knowledge and investment in the community; and 3) Stereotypes and stigmas must be unlearned. Additional analyses provides support that the proposed CBPR curriculum would be both feasible and acceptable in this community with minor changes including: 1) Greater focus on the "real-life" effect of diseases; 2) Increased simplicity of health language; and 3.) Addition of soft skill training to increase trust and confidence while engaging with the community.

CONCLUSION: Collaboration between community and research members is acceptable, feasible, and has the potential to enhance the effectiveness of interventions designed to decrease health disparities. In addition to gaining insight to the local socio-political factors influencing health disparities in a community, the effectiveness, acceptability, and transferability of program content must be evaluated. This step-wise research has produced a promising curriculum aimed to reduce HIV, HCV, and colorectal cancer disparities in AA men.

UAB College Arts & Humanities

Impact of Tobacco Smoke Exposure on Pulmonary Function in Pediatric Cystic Fibrosis

Zhu, Aowen, M.A.; Harris, William T, MD; Stepanikova, Irena, PhD; Thomas, Lacreacia, MSN; Gamble, Stephanie, RRT; Mims, Cathy, RN; Oates, Gabriela, PhD

OBJECTIVES: Cystic fibrosis (CF) outcomes have been associated with a number of socioeconomic factors. Tobacco smoke exposure (TSE) is one of the mechanisms through which socioeconomic status impacts the health of CF patients. However, TSE may have an additional independent effect on disparities in CF lung health. This study investigated the effects of TSE and socioeconomic factors on lung function in CF patients aged 6 and 11 years.

METHODS: A retrospective analysis evaluated socio-environmental and clinical data of CF patients at age 6 (n=145) and age 11 (n=87) to identify factors contributing to early CF respiratory decline. Spirometric values were compared to normative (Wang, FEV1%: normal=100% predicted) equations. The highest, mean, and lowest FEV1% values at each age were assessed. Clinical measures included genotype and *P. aeruginosa* status. Socio-environmental measures included TSE, annual household income, paternal education, maternal education, and health insurance.

RESULTS: The sample was 45% female, 57% Δ F508 homozygous. TSE was reported in 28% of patients; 33% had annual household income <\$30,000; 39% of fathers and 29% of mothers had high-school education or less. In bivariate analyses, TSE was linked to significantly lower values for highest, mean, and lowest FEV1% at age 6 (-4.8, p<0.05; -6.6, p<0.01; -8.8, p<0.01, respectively), with a further detriment at age 11 (-10.6, p<0.01; -12.8, p<0.01; -15.5, p<0.001). Low income (<\$30,000) and low paternal education (=high school) had a negative effect on FEV1% at both ages in bivariate analyses. However, in multiple regression models, TSE was the only independent variable significantly associated with lung function decline at age 11 (-10.8, -11.6, -11.5 for highest, mean, and lowest FEV1% respectively; p<0.001 for all).

CONCLUSION: TSE is the main contributor to diminished lung function at age 6, with doubled negative impact at age 11. These findings emphasize the importance of TSE as an addressable modifier of CF lung disease. TSE data should be routinely collected, and smoking cessation strategies should be prioritized in CF clinical practice as a fundamental aspect of CF care.



2018 Excellence in Mentoring Awards

The UAB MHRC Training Program relies on dedicated mentors who go above and beyond to help guide young investigators in the field of health disparities research. This year's recipients not only have provided outstanding mentoring, but have contributed substantially to the career development and retention of students and scholars.

Congratulations to Dr. Brian Rivers and Dr. Wendy Demark-Wahnefried.

Excellence in Mentoring Award for Graduate Students



“When I think of a mentor, I imagine an accomplished professional who actively uses his or her power and knowledge to invest in others. That is Dr. Rivers! He can be seen almost daily with students and seasoned professionals spilling in and out of his office. He somehow manages to gracefully integrate the skills and interests of those under his tutelage to create a unified team. He shows us ways to advance our learning and productive ways to support each other. I am most appreciative of Dr. Rivers' balance between open communication and regular follow-up alongside space and freedom for me to grow as a researcher.”

Zakiya Haji-Noor

Brian M. Rivers, PhD

Morehouse School of Medicine

Nominated by Zakiya Haji-Noor and Ashley Ojeaga, MPH

“I find it rewarding to help guide young scholars on their journey to becoming independent researchers. Working with such bright young students as Zakiya Haji-Noor and Ashley Ojeaga has given me a chance to pass on what my mentors taught me.”

Dr. Brian Rivers

Excellence in Mentoring Award: Post-Doctoral or Junior Faculty



“Dr. Demark-Wahnefried has provided me with active research guidance and intellectual leadership. As postdoctoral fellow on her NCI funded R01 “Harvest for Health in Older Cancer Survivors,” I have gained invaluable hands-on research experience and guidance on research design and implementation, which has launched me forward in developing my own program of research. Her commitment, passion, accountability, decision making, communication skills, and ability to empower others make her an inspiring leader. Her leadership has prepared and inspired me to step up and become a leader as a Cancer Research Experiences for Students (CaRES) preceptor.”

Dr. Jennifer Bail

Wendy Demark-Wahnefried, PhD

University of Alabama at Birmingham

Nominated by Jennifer Bail, PhD, RN

“Everyone needs a mentor (and better yet, a team of mentors). I have benefited tremendously from my mentors and I hope that I can help the next generation. Having mentees, like Jennifer Bail, PhD, makes mentorship easy.”

Dr. Wendy Demark Wahnefried



16 YEARS OF IMPROVING HEALTH, IMPROVING LIVES

2002

- MHRC established
- REACH 2010 grant awarded and Community Health Advisors begin work



2007

- MHRC receives NIMHD Phase II Center of Excellence Funding
- MHRC Excellence in Mentoring Award established
- CDC funds REACH US



2002-2010

2003

- NIMHD awards MHRC a National Center of Excellence Phase I



2008

- Dr. Mona Fouad appointed to NIMHD Advisory Council
- Center name changed to Minority Health & Health Disparities Research Center
- Young Professionals Board is established



2004

- Charles Barkley supports young investigators with a major gift



2009

- Young Professionals Board holds first Casino Royale fundraising gala
- Maya Angelou is a special guest at 6th MHRC gala



2005

- MHRC approved as a UAB UWRIC
- 1st UAB Health Disparities Research Symposium
- MSM/TU/UAB Cancer Partnership established
- Dr. Mona Fouad receives Sullivan Award



2006

- WALK Feel Alive & Healthy Happy Kids programs begin
- Community Advisory Board established
- Annual gala raises more than \$238,000



2010

- Charles Barkley is a special guest at the 7th MHRC fundraising gala
- Health and Economic Development Summit partners with the Centre for Health and Development in the UK



2011

- NIMHD funds Center of Excellence Phase III
- UAB HealthSmart, a health education and wellness facility, opens in the heart of downtown Birmingham



- 10th annual UAB Health Disparities Research Symposium

2015



2011-2018

2012

- NIMHD awards U54 funding for MidSouth TCC to study social determinants of health
- US-UK Communities for Health Partnership formed with University of Staffordshire, UK
- First Lady Michelle Obama visits Healthy Happy Kids childhood obesity prevention program



2016

- REACH Parks Rx launches
- UAB HealthSmart moves to Medical Towers



2013

- NIMHD funds two more U54 centers for African American Men's Health and Health Policy



- UAB chosen as a STEP-UP coordinating research site for a national research program, funded by NIDDK
- YP Board introduces Harlem in the 'Ham fundraiser, raising \$65,000 for Healthy Happy Kids



2014

- CDC awards U58 grant for Birmingham REACH for Better Health



2018

- MHRC receives a U54 grant from NIMHD to establish the Obesity Health Disparities Research Center
- Since 2002, the MHRC has returned more than \$163M in external funding to UAB



UAB Minority Health & Health Disparities Research Center (MHRC)

The UAB MHRC is a University-Wide Interdisciplinary Research Center, approved by the Board of Trustees of the University of Alabama System. It has been a designated Center of Excellence in Health Disparities Research by the National Institute on Minority Health and Health Disparities. The MHRC generates and disseminates research knowledge from biomedical, behavioral, and social sciences to reduce health disparities experienced by vulnerable populations.

uab.edu/mhrc

Mid-South Transdisciplinary Collaborative Center for Health Disparities Research (Mid-South TCC)

Since 2005, the Mid-South TCC is a regional academic-community research consortium that investigates the social determinants of health disparities in obesity and related chronic diseases in six Mid-South states (Alabama, Mississippi, Louisiana, Arkansas, Tennessee, and Kentucky) and implements interventions to ameliorate such disparities.

uab.edu/midsouthtcc

Gulf States Health Policy Center

The Gulf States Health Policy Center is a comprehensive community, education, and research center focused on improving health outcomes in the Gulf States region (Alabama, Mississippi, Louisiana, Florida, and Texas). The Center's work involves coalition building, health education, and interdisciplinary, community-driven research. It is committed to helping create a more healthy and fit nation.

gshpc.org

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