

SOCIAL DETERMINANTS OF
HEALTH: **FRAMING**
THE ISSUES

*Part of the James E. Clyburn
Health Disparities Lecture Series
April 21, 2009*

**POSTER SESSION &
ABSTRACTS**



UNIVERSITY OF
SOUTH CAROLINA

Social Determinants of Health: Framing the Issues

**Part of the James E. Clyburn Health Disparities Lecture Series
April 21, 2009**

POSTER SESSION & ABSTRACTS

The poster session and corresponding abstract booklet showcase health disparities research and practice being conducted by University of South Carolina faculty members, research staff, and students as well as community, clinical, and/or agency partners.

Funding for this conference was made possible (in part) by 5P20MD001770-04 from the National Center on Minority Health and Health Disparities. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention by trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

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Title: Does discrimination or distrust matter? : Effects of access to care, perceived discrimination, and health system distrust on cervical cancer prevention and control in South Carolina

Authors: Bellinger JD, Brandt HM, Probst JC, Glover S, Martin AB, Hardin JW.

Previously Presented At/Published In (if applicable): N/A

Abstract (limit to 300 words):

Introduction: The introduction of Pap tests contributed to reduced cervical cancer mortality. However, not all groups benefited equally. Perceived discrimination and distrust may contribute to health disparities. The study objective was to examine effects of access, experiences of discrimination, and health system distrust on cervical cancer prevention and control.

Methods: A population-based telephone survey was administered to randomly selected adult English-speaking women (18-70) in South Carolina (n=986). Self-reported measures of access, experiences of discrimination, and health system distrust were measured. Screening was measured by a Pap test within three and five years of interview. Logistic regression analyses were conducted.

Results: Over half (57.3%) of the sample reported no lifetime discrimination experiences. More African Americans reported high experiences of perceived discrimination (34.2%) than whites (4.0%) ($p < .0001$). Access was a greater predictor of appropriate cervical cancer screening than perceived discrimination or health system distrust. Women with a regular provider (OR=2.819 CI 1.449, 5.483; OR=2.356 CI 1.128, 4.920) and private health insurance (OR=2.970 CI 1.364, 6.469; OR=2.769 CI 1.146, 6.694) were more likely to report 3- and 5-year Pap tests. African American women with low perceived discrimination were less likely to report Pap tests within five years than those with no perceived discrimination (OR=0.239 CI 0.060, 0.949).

Conclusions: The markedly higher odds of reporting perceived discrimination and distrust in African Americans may contribute to health disparities. However, access was the strongest predictor of screening. Improved access, especially to safety net health centers, could increase screening and ultimately lead to reduced cervical cancer mortality.

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This research was conducted as part of a funded study entitled, "A Population-Based HPV Survey of Women in South Carolina." A Population-Based HPV Survey of Women in South Carolina is supported by grant number R15CA125600 (PI: Heather Brandt) from the National Institutes of Health. This research was also supported by the South Carolina Cancer Disparities Community Network (SCDCN). The SCDCN is supported by grant number U01CA114601 from the National Cancer Institute as part of the Community Networks Program of the Center to Reduce Cancer Health Disparities. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Website (if applicable): N/A

Title: A Case Study Evaluation of Factors Associated with Access to and Utilization of Oral Health Services for Persons Living with HIV/AIDS in Rural South Carolina

Authors: Flournoy M, Martin AB, Glover SH, Corwin SJ, McTigue JF.

Previously Presented At/Published In (if applicable): N/A

Abstract (limit to 300 words):

Accessing oral health services can be challenging for many Americans, especially those who are HIV+. The rates of incidence, reduced quality of life, and mortality from HIV infection are disproportionately higher in rural South Carolina than in other urban regions in the state. For persons who are HIV+, some barriers to access include cost, provider shortages, provider liability concerns, unwillingness to treat and fear of going to the dentist. Additionally, there is a lack of awareness about the importance of regular dental care and the relationship between oral and physical health for persons living with HIV.

As part of the Special Projects of National Significance (SPNS) Oral Health Initiative, the Sandhills Medical Foundation (SMF) implemented Project Save Our Smiles. Project SOS utilizes an innovative service delivery model to provide oral health care to persons living with HIV in six rural counties in South Carolina. SMF implemented a mobile oral health services program that serves patients, regardless of their HIV status, at its community health center sites. Before enrollment, many participants were out of care and did not have a regular dental care provider. The preliminary results are indicating that if major systemic barriers to access to oral care are reduced or eliminated, enrollment in a mobile oral health program can be a viable method of providing accessible and affordable quality dental services; thereby reducing oral health emergencies and increasing quality of life in HIV+ persons. Recommendations to further serve patients in need include geographical expansion and continuous patient reassurance to facilitate patient retention.

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ABSTRACT #: 3

POSTER #: 2

Title: Molecular Pathogenesis of Prostate Cancer in Relation to the African American Community, the Role of Zinc and Zinc Transporters: Environment and Genetic Influences

Authors: Johnson LA, Berry K, Bagasra O.

Previously Presented At/Published In (if applicable):
Clark Atlanta University

Abstract (limit to 300 words):

Virtually all human diseases are the result of the interaction of genetic susceptibility factors and modifiable environmental factors, broadly defined to include infectious, chemical, nutritional and behavioral factors. Many people tend to classify the cause of a disease as either genetic or environmental. Prostate cancer is the most prevalent type of cancer observed within African American men. It is the second most common cancer diagnosed. African Americans disproportionately suffer from prostate cancer. On average, AAs are twice as likely to develop PC as compared to EAs of similar age. The content of zinc in the prostate glandular cells is among the highest in the body, serving as an essential trace element responsible for key biological processes including growth, development, and reproduction. We are hypothesizing that zinc and the transportation of zinc is believed to be a vital component in the pathogenesis of PC. Through a series of experiments (Color Shift Assay, Histological and Differential Zinc Staining, and Intracellular Zinc Determination), the role of zinc in the development of PC was seen. It is and has been clearly shown that AAs experience down-regulation of zinc than EAs. This down-regulation of zinc appears to play a role in the development of diabetes, breast cancer, hypertension and that of the aforementioned, all of which disproportionately affects AAs *versus* any other racial groups. Based on genetic and environmental factors, the studies clearly established that the appropriate amount of zinc is not being taken in by areas where zinc is of high importance for proper cell function and survival, like that of the peripheral zone.

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These studies were supported by grants NIH/NCRR (P2RR16461) and DoD/CDMRP (PC074307)

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Title: Eliminating Health Disparities: Creating a welcoming atmosphere for all patients

Authors: Jones, MM.

Previously Presented At/Published In (if applicable): N/A

Abstract (limit to 300 words):

In creating a welcoming atmosphere for all patients two areas will be reviewed: office setting and display, and cultural competence communication.

Office Setting & Display

Health care institutions should strive to create and promote a warm and welcoming atmosphere in which patients are comfortable seeking medical attention. The initial impression is often in reaction to the setting and display of the area. A judgment is made immediately, whether positive or negative. In order to overcome organizational barriers, health care leadership must design the practice to cater to the needs of the majority as well as the minority. This goal can be achieved by taking into consideration the physical set up. Physical set up includes proper signs, solutions to overcoming language barriers, items to entertain patients, as well as taking into consideration the basic needs of patients. A well labeled drop-box to receive comments and suggestions can also be helpful.

Cultural Competence Communication

Culturally competent communication refers to communicating with awareness and knowledge of healthcare disparities and understanding that sociocultural factors have important effects on health beliefs and behaviors, as well as having the skills to manage these factors appropriately. This matters because patients from various racial, ethnic, and socioeconomic groups need this form of communication in order to receive quality care to the maximum.

Cultural obscurities prevent health care providers from accurately pin pointing problems, and fundamental qualities of clients' "diseases" are never recognized or treated because health care providers' may fail to acknowledge differences between their views and their patients'. Minority patients also face barriers in regards to referrals to specialists and recommendations of continuity of care. Patient profiling and staff training are two ways to bridge the gap between reducing health disparities and patient care.

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Title: Social disparity of mothers without companionship during pregnancy results in prenatal stress that effects levels of estradiol, progesterone, and cortisol

Authors: Kamaus K, Albergottie A.

Previously Presented At/Published In (if applicable): N/A

Abstract (limit to 300 words):

The goal of this study is to compare hormone levels of estradiol, progesterone, and cortisol among women who are not in a steady relationship and those who are in a steady relationship during pregnancy. To our knowledge the possibility of prenatal stress contributing to hormonal changes based on relationship status has not been studied. Mothers who are not in steady relationships have unequal disadvantages during pregnancy. Higher prenatal stress can be a result of a social disparity identified in these mothers. We will characterize maternal stress by using social factors including companionship, employment atmosphere, and living conditions. Research has shown that maternal stress influences prenatal hormone levels. We hypothesize that increased prenatal stress related to relationship status and living conditions are directly related to alterations in prenatal levels of estradiol, progesterone, and cortisol.

The Pregnancy Environment and Child Health (PEACH) Study is comprised of 133 pregnant women from South Carolina, including 40% African Americans, 50% Caucasians, and 10% Hispanics. Telephone interviews provided information on maternal living and working conditions, stress, smoking and diet. Estradiol, progesterone, and cortisol levels during pregnancy were measured using saliva samples collected three times at approximately four weeks apart between gestational week 20 and 40. Statistical analyses include linear mixed models to account for repeated hormone measurements.

Pregnant women who are not in steady relationships have lower estradiol levels. Women working in a job that required a lot of repetitive work had statistically significant lower cortisol levels during pregnancy. Overall cortisol levels in women not in steady relationships were not significant but more factors need to be researched such as chronic stress. This study shows an association between stress and hormone levels and suggests future investigation regarding risk factors for pregnant women not in steady relationships.

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Title: Prevalence of Sexual Risk-Taking Behaviors Among African-American Adolescents: Baseline Results from Project iMPPACS Columbia Site.

Authors: Kershner SH, Kerr JC, Walker WA, Massey D, Farber N, Valois RF.

Previously Presented At/Published In (if applicable):

American Public Health Association presentation at the APHA Annual Conference, San Diego, CA, October 25, 2008.

Abstract (limit to 300 words):

Purpose: Determine the prevalence of sexual risk-taking behaviors of African-American adolescents in Columbia, South Carolina as a component of the NIH-funded Project iMPPACS, a multi-level, multi-site HIV/STI prevention intervention.

Subjects: Data were collected on 452 (250 Females; 202 Males) African-American adolescents (age 14-17) prior to program intervention.

Design: A cross-sectional design was utilized with baseline measurement data collected over one year.

Methods: Audio Computer Assisted Self Interview Surveys assessed baseline measurements for sexual behaviors (oral, anal, and vaginal intercourse) and condom usage. Subjects submitted urine samples for testing and subsequent treatment if positive for Chlamydia, Gonorrhea, and/or Trichomoniasis.

Analysis: Frequencies and percentages were computed to determine oral, anal, & vaginal intercourse and sexual-act specific condom use behaviors.

Results: For adolescents who had participated in vaginal sexual intercourse, approximately 62% reported at least one incident of no condom use in the past 3 months. Of participants who reported engaging in anal sexual intercourse, approximately 66% reported at least one incident of no condom use in the past 3 months. Of participants who reported engaging in oral sex, approximately 80% reported at least one incident of no condom use in the past 3 months.

Conclusion: African-American adolescents via their engagement in high risk sexual behaviors are at significant risk of unintended pregnancy, acquiring STI's, in particular HIV infection. Programmatic efforts should be directed towards decreasing risk behaviors via effective culturally competent, multi-faceted interventions and policies.

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Acknowledgments (if applicable): We would like to thank our community partners that have been instrumental in the success of Project iMPPACS, including: Boys and Girls Club of the Midlands, Booker T. Washington Heights Community Center, Ebenezer Baptist Church, St. John Baptist Church, A Better Way – Project Gang Out, Epworth Boys and Girls Home, Carolina Boys Home, and Dr. Michelle Rojas. We would also like to thank our Advisory Board Members: Rae Borders-Gray, Charlene Primus, Beth Barry, James Brown, Henry Hopkins, Reverend Jamery O’Graham, and Beverly Hart Pittman.

Website (if applicable):

Project iMPPACS
<http://www.imppacs.org/>

ABSTRACT #: 7

POSTER #: 5

Title: Are We Reducing Children's Oral Health Disparities? Findings from the 2007/2008 South Carolina Oral Health Needs Assessment

Authors: Martin AB, Olatosi B, Veschusio C, Carlson V.

Previously Presented At/Published In (if applicable):

Presented at the 2009 National Oral Health Conference in Portland, Oregon

Abstract (limit to 300 words):

Purpose: The purpose of the study was to describe the oral health status of South Carolina's children.

Methods: The Oral Health Needs Assessment (OHNA) is conducted every 5 years by CDC Cooperative Agreement recipients using the Basic Screening Survey (BSS) created by Association of State and Territorial Dental Directors. South Carolina conducted its OHNA during the 2007-2008 school year. BSS data was linked to Medicaid claims and Free and Reduced Lunch (FRL) participation data for validation.

Findings

Sealants - No differences detected between children along the following strata: race, age, gender, and FRL participation. Children enrolled in Medicaid were more likely to have sealants.

Black children were more likely to have caries than White. Children enrolled in Medicaid were more likely to have caries. FRL participants were more likely to have had caries.

Black children were more likely than White to have untreated caries. No differences were detected between children enrolled in Medicaid and other children. FRL participants were more likely to have untreated caries.

Black children were more likely to have treatment urgencies than White. No differences detected between children enrolled in Medicaid and other children. FRL participants were more likely to have treatment urgencies.

While race-based disparities were observed, they were pronounced for rural and poor children. Children enrolled in Medicaid appeared to have better oral health status than other children. Key policy and program factors may be driving improvements.

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Acknowledgments (if applicable):

Funding for the study was through the State Oral Health Infrastructure Cooperative Agreement from the Centers for Disease Control and Prevention.

Special thanks is given to Kathy Phipps for developing the sample protocol and the Division of Oral Health staff at SC DHEC and their school partners for collecting the oral health status indicators.

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Title: Vaso-occlusive pain early in life increases acute procedural pain in the pediatric sickle cell population

Authors: McKelvy A, Mark T, McClellan C, Puffer E, Roberts C, Schatz J, Sweitzer S.

Previously Presented At/Published In (if applicable):

McClellan CM, Schatz JC, Mark TRM, McKelvy AD, Puffer E, Roberts C, Sweitzer SM. Criterion and convergent validity for four measures of pediatric pain in sickle cell disease. *Clinical Journal Pain*, 2009. 25(2):146-52.

Abstract (limit to 300 words):

Children with Sickle Cell Disease (SCD) experience significant painful vaso-occlusive episodes (VOEs) and increased rates of routine painful medical procedures to monitor disease severity and progression. The first VOE may occur as early as six months, but age of onset, frequency and severity vary. Limited understanding of the mechanisms precludes effective SOD pain treatment. Studies of premature infants and male infant circumcision at birth indicate painful experiences early in life affect the developing nervous system and alter pain sensation. Little is known regarding the impact of VOEs on subsequent pain experiences. This study used a multi-method evaluation of pain in response to a routine venipuncture across three age groups (2-4, 5-9, and 13-18 years) of children with SOD. Venipuncture pain was evaluated via heart rate changes, parent and child pain reports and observations of behavioral distress. This investigation is the first to conduct a multi-method evaluation of procedural pain across age. Change in heart rate, pain reports and behavioral distress decreased as age increased. Data was also analyzed to compare the affect of VOE onset prior versus after 3 years. Patients whose first episode occurred in the first three years of life exhibited greater increases in heart rate, higher pain reports and more behavioral distress. These data indicate venipuncture pain is greater for younger children and painful VOEs early in development sensitize a child to acute procedural pain later in life. These findings emphasize the importance of pain management during both routine painful procedures and VOEs especially in younger children.

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Acknowledgments (if applicable): N/A

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Title: The effect of time of return to work on breastfeeding initiation and duration

Authors: Ogbuanu C, Glover SH, Probst J, Liu J, Hussey J.

Previously Presented At/Published In (if applicable): N/A

Abstract (limit to 300 words):

Background: Non-initiation and early cessation of breastfeeding have been attributed to work-related issues. Our objective was to determine the effect of time of return to work on breastfeeding initiation and duration.

Methods: Data were from the Early Childhood Longitudinal Study-Birth Cohort. Restricting our sample to singletons whose biological mothers were the respondents at the 9-month interview and worked in the 12 months before delivery (unweighted n~6,150), we classified time of return to work after delivery (weeks) as 1-6, 7-12, ≥ 13 , and 'not yet returned to work'. Analyses included cross-tabulations, multiple logistic and Cox proportional hazards models (SUDAAN).

Results: While 69.4% initiated breastfeeding, breastfeeding initiation was highest among women who had not yet returned to work (71.9%) and lowest among women returning within 1-6 weeks (referent group; 63.3%; $p=0.0529$). In adjusted analysis, women who had not yet returned to work had a 1.46 times greater odds (95%CI=1.08-1.97) of initiating breastfeeding than the referent group. The hazard of cessation of any breastfeeding over the observation period (mean: 24.5 months) was 19% less (95%CI=0.68-0.97) among women returning at ≥ 13 weeks compared to the referent group. For exclusive breastfeeding (mean observation period: 10.5 months), the hazard of cessation was 22% less (95%CI= 0.63-0.96) among women returning at ≥ 13 weeks and 24% less (95%CI=0.59-0.98) among women who had not yet returned to work, compared to the referent group.

Conclusions: Women returning to work later are more likely to initiate breastfeeding and breastfeed longer. Policies should be instituted to enable women take sufficient time off work to fulfill their motherly roles.

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Website (if applicable): N/A

Title: Balancing Work and Family: The Effect of Employment Characteristics on Breastfeeding Initiation and Duration

Authors: Ogbuanu C, Glover SH, Probst J, Liu J, Hussey J.

Previously Presented At/Published In (if applicable): N/A

Abstract (limit to 300 words):

Background: Non-initiation and early cessation of breastfeeding have been attributed to work-related issues. We investigated the effect of postpartum employment status and occupational type on breastfeeding initiation and duration.

Methods: Data were from the Early Childhood Longitudinal Study – Birth Cohort. Restricting our sample to singletons whose biological mothers were the respondents at the 9-month interview (unweighted n~8,750), we classified postpartum employment status as full-time, part-time, and unemployed. Among those working postpartum (n~4,500), occupational type was classified as ‘management’, ‘professional’, ‘service’, ‘sales’, ‘administrative’, and ‘other’. Analyses included chi-square tests, multiple logistic regressions, and Cox proportional hazards models (SUDAAN 10).

Results: Of all mothers of singletons born in the US in 2001, 69.5% initiated breastfeeding. The proportion initiating breastfeeding by employment status was 66.8% (full-time), 71.9% (part-time) and 70.3% (unemployed; $p=0.1041$). The rate of breastfeeding initiation was highest among women in ‘professional’ occupations (83.4%) and lowest among women in ‘other’ occupations (58.4%; $p<.0001$). In adjusted analysis, full-time workers were 0.72 (95% CI=0.57, 0.92) times less likely to initiate breastfeeding compared to unemployed women. Women in ‘professional’ occupations had a 1.79 (95% CI=1.19–2.68) times greater odds of initiating breastfeeding compared to women in ‘administrative’ occupations. Full-time workers had a 19% (95% CI=1.01-1.40) greater hazard of cessation of any breastfeeding as compared to unemployed women.

Conclusions: Full-time work postpartum may negate breastfeeding initiation and continuation. Women starting work postpartum should be provided with part-time options. Similarly women in other occupations should be afforded the job control needed to make wise infant feeding decisions.

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Website (if applicable): N/A

Title: Birth order modifies the effect of *IL13* gene polymorphisms on serum IgE at age 10 and skin prick test at ages 4, 10 and 18: A prospective birth cohort study.

Authors: Ogbuanu IU,*¹Karmaus W,¹ Zhang H,¹ Attwood TS,² Ewart S,³ Roberts G,⁴ Arshad SH.⁴

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Previously Presented At/Published In (if applicable): N/A

Abstract (limit to 300 words):

Background: Susceptibility to atopy originates from environmental effects on genes. Birth order has been identified as a risk factor for atopy; however no study has yet assessed a birth order-gene interaction.

Methods: Mother-infant dyads were recruited antenatally and followed prospectively to age 18. Questionnaire data (birth, age 4, 10, 18); skin prick test (SPT) at ages 4, 10, 18; total serum IgE and specific inhalant screen (age 10); and genotyping for Interleukin-13 (IL13) were performed. Three SNPs were selected: rs20451 (nonsynonymous), rs1800925 (promoter) and rs2066960 (intron). Analysis included multivariable log-linear regression analyses using repeated measurements to estimate prevalence ratios.

Results: Of 1456 participants, 83.2% (1212/1456) had birth order information; SPT was performed on 67.4% at 4, 71.2% at 10 and 58.0% at 18 years. The prevalence of atopy (sensitization to one or more food or aeroallergens) increased from 19.7% at 4, to 26.7% at 10 and 41.1% at age 18. Repeated measurement analysis indicated interaction between rs20541 and birth order on SPT. Stratification demonstrated that IL13 effect on SPT was restricted only to first-born children ($p=0.007$; adjusted PR=1.35; 95%CI=1.09,1.69). Over childhood and adolescence, the interaction did not diminish. Firstborns showed similar findings for elevated total serum IgE at age 10 ($p=0.007$; PR=1.73; 1.16, 2.57) and specific inhalant screen ($p=0.034$; PR=1.48; 1.03,2.13).

Conclusions: This is the first study to show an interaction between birth order and IL13 polymorphisms on allergic sensitization. Future functional genetic research need to determine whether birth order is related to altered expression or methylation of the IL13 gene.

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Title: Maternal Atopic Status may Modify the Effect of *IL13* Gene Polymorphisms on Serum IgE at Age 10 and Skin Prick Test at Ages 4, 10 and 18 Years.

Authors: Ogbuanu IU,*¹Karmaus W,¹ Zhang H,¹ Attwood TS,² Arshad SH.³

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Previously Presented At/Published In (if applicable): N/A

Abstract (limit to 300 words):

Background: Atopic disorders result from complex interactions between genes and the environment. While maternal atopic status has been identified as a risk factor, no study has yet assessed a maternal atopic status-offspring gene interaction.

Methods: Mother-infant dyads were recruited antenatally and followed prospectively to age 18. Questionnaire data (at all ages); skin prick test (SPT) at ages 4, 10, 18; total serum IgE (sIgE) and specific inhalant screen at age 10 (inhIgE); and *IL13* genotyping were collected. Three SNPs were selected from *IL13*: rs20451 (exon 4, nonsynonymous), rs1800925 (promoter) and rs2066960 (intron 1). We used standard multiple imputation techniques to impute (PROC MI) and analyze (PROC MIANALYZE) missing IgE values, in addition to a multivariable repeated measurements analysis.

Results: Of the 1456 participants, maternal atopic status information was available for 99.7% (1451/1456); SPT was performed on 67.4% (age 4), 71.2% (age 10) and 58.0% (age 18). The prevalence of atopy (sensitization to one or more food or aeroallergens) increased from 19.7% (age 4), to 26.7% (age 10) and 41.1% (age 18). There was significant interaction between rs2066960 and maternal atopic status on inhIgE ($p = 0.015$). Stratification demonstrated that the effect of *IL13* on inhIgE was restricted to children of mothers with normal IgE and positive history of atopy ($p=0.045$; adjusted PR=0.51; 95%CI=0.27, 0.99). This interaction disappeared after adjustment for cord serum IgE. A similar trend was found for SPT.

Conclusions: This is the first study to show an interaction between maternal atopic status and *IL13* polymorphisms on allergic sensitization.

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Title: Dying for [no] coverage: Effects of Lack of Insurance on Mortality among Working-Age Adults

Authors: Probst JC, Bellinger JD, Walsemann K, Hardin J.

Previously Presented At/Published In (if applicable): N/A

Abstract (limit to 300 words):

Introduction: Racial and ethnic disparities in life expectancy are marked. While infant mortality contributes to this difference, the majority of excess deaths occur in middle age. The research purpose is to ascertain whether health insurance helps ameliorate racial disparities in premature mortality.

Methods: Data were drawn from the 2004 National Health Interview Survey (NHIS) Linked Mortality File, which links respondent information to death records through 2002. Our analysis examines the years 1990-1991, restricted to adults between 45 and 64 (n=45,572). The dependent variable was mortality status (5,989 deaths). Our independent variables are race/ethnicity and health insurance status when interviewed. Demographic characteristics were held constant in multivariable analysis. Logistic regression was used to model the probability of death by 2002, with survey year included to account for differential follow time. All analyses are weighted to account for complex sample design.

Results: Overall, 81.5% of respondents reported private insurance, 6.7% public insurance, and 11.7% uninsured. Minorities were more likely to be uninsured (19.1% black, 26.8% Hispanic, and 19.7% other adults, versus 9.2% of white respondents). In analysis holding age, sex and year constant, uninsured persons had an elevated risk of death by 2002 (OR 1.50, CI 1.40-1.61), as did publicly insured persons (OR 1.74, CI 1.64-1.85). In similar analysis, black adults had an elevated risk of death (OR 1.50, CI 1.37-1.65) compared to white adults. In fully adjusted analysis, uninsured white, black and "other" respondents had higher odds for death than white privately insured persons. Publicly insured persons were generally at higher risk.

Discussion: Lack of health insurance markedly increases the risk of death. Current public health insurance regulations generally limit coverage to persons already disabled by health problems. Mechanisms for expanding health coverage to persons not yet disabled may forestall death during typical working years and yield long-term economic benefits.

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Title: Understanding the effects of environmental injustice influenced by toxic waste facilities on birth outcomes in South Carolina

Authors: Salaam MM, Richard R, Wilson S.

Previously Presented At/Published In (if applicable): N/A

Abstract (limit to 300 words):

Objective: An ecological study was conducted to assess county-level exposure to Toxics Releases Inventory (TRI) emissions and its influence on preterm delivery and low birth weight (LBW) in South Carolina. We also sought to explore environmental injustice within the state and its influence on birth outcomes.

Methods: County level birth data from 1995-2005 was obtained on infants born in South Carolina. Data on TRI emissions was obtained from the Right to Know (RTK) Network. Census data on state demographics and socioeconomic variables were also collected.

Results: From 1995-2005, preterm births increased from 9.6% to 12.7%. Simultaneously, LBW infants also increased from 9.1% to 10.1%. TRI emission levels and the number of facilities also increased during the study period. Counties with high levels of TRI emissions also showed high percentages of African Americans, high poverty, and low income.

Conclusions: The presence of health disparities in birth outcomes is prevalent throughout South Carolina. African-American infants make up a third of the state's newborn population, yet they disproportionately account for 43% of preterm and half of LBW infants. These disparities are possibly influenced by environmental and socioeconomic factors. Future research is needed to understand these associations at the individual level and to further understand environmental injustice issues throughout the state.

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Title: Squatters, Mega Cities and Sustainability

Authors: Samuel M.

Previously Presented At/Published In (if applicable): N/A

Abstract (limit to 300 words):

Squatting is the act of occupying an abandoned or unoccupied space or building that the squatter does not own, rent or otherwise have permission to use. The World Health Organization estimates that approximately 3 billion people now live in cities around the globe. Environmental management and sustainability of these mega cities requires a unique understanding. A recent report released by the Centre on Housing Rights and Evictions notes that while previous studies found that women who migrate to cities do so to join family members-mostly husbands-in the city, this trend appears to be changing; an increasing number of women are migrating to cities on their own, often to escape domestic violence or discrimination in rural areas, or because they have been disinherited. In Mumbai, India a city that was most recently struck by terrorists there are about 12 million residents and 6 million of them fall into the category of squatters. South African squatters live in informal settlements usually on the larger cities perimeters. Significantly large squatter communities exist in Nairobi, Kenya. There is one area of Nairobi known as Kibera where approximately 1 million people live in mud huts without roads, water, toilets, sewage pipes or other services necessary for sustainability. South Carolina is in a unique position as it pertains to health care tracking of its homeless and disenfranchised populations. Homeless women and children encounter great difficulty in terms of accessing appropriate health providers. They have no permanent address for follow up care once it has been discovered that they may be suffering from hypertension, diabetes, cancer, asthma or HIV/AIDS. It is essential that community based health care be established to treat South Carolinas' homeless and indigent populations.

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TITLE: Engaging Communities Through Town Hall Forums

AUTHORS: Stewart TT, Clinton K, Ureda J, Griffin S.

ABSTRACT (*limit to 300 words*):

During the Summer 2007, the EXPORT Center of Excellence (COE) in Cancer and HIV Research (known as EXPORT) conducted focus groups and key informant interviews throughout towns and communities in Orangeburg County. The information gained through the thirty one interviews and eleven focus groups has been essential in guiding the COE Community Partnership and Outreach Core in addressing HIV/AIDS, Human Papillomavirus (HPV) and Cervical Cancer. Many participants identified social determinants that interconnects the increased prevalence of HIV/AIDS and described a need for HPV prevention and awareness. The results were evaluated and disseminated to town residents including key informants, focus group participants and community leaders through Town Hall Forums. Each forum empowered participants to take action and address health disparities in targeted communities. The COE also promoted partnerships that continue to support and strengthen community efforts to eliminate health disparities. This poster describes the events, activities, and partnerships that formed as a result of these meetings.

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ABSTRACT #: 17

POSTER #: 10

Title: HIV testing and prostate cancer screening behaviors of older adult men (50-64 years old) in South Carolina: Is there an association?

Authors: Wigfall L, Torres ME, Richter DL.

Previously Presented At/Published In (if applicable): N/A

Abstract (limit to 300 words):

Background: At the end of 2003 an estimated 252,000-320,000 HIV-infected persons in the United States were unaware of their status (Glynn & Rhodes, 2005). In 2006, recommendations for HIV testing were revised to include all persons (13-64 years old) regardless of risk (CDC, 2006). There were 2,079 reported cases of HIV/AIDS diagnosed in persons (50+ years) in South Carolina through December 2007. Of these cases, approximately half (1,053) were reported in African American males (SCDHEC, 2007). Despite the increasing prevalence of HIV/AIDS among older adults in South Carolina, HIV testing rates have remained low (~6%) (SCDHEC, 2008).

Study design: A secondary data analysis of the 2006 Behavioral Risk Factors Surveillance (BRFSS) survey data was conducted using a sample of non-hispanic, older adult males (50-64 years old) in South Carolina. Chi-square and multivariate logistic regression analyses were performed to determine associations between HIV testing and prostate cancer screening behaviors.

Results: Only white and African American men (50-64 years old) with no history of prostate cancer were included (n=704) in this study. Less than one fourth (22%) of the participants reported having ever been tested for HIV. In multivariate analysis, men who had a prostate-specific antigen (PSA) test within the past year, were younger in age, African American, divorced/separated, and engaged in HIV-related high-risk behaviors were more likely to have been tested for HIV.

Conclusions: Heterosexual contact is the primary route of HIV transmission among women of all ages. A thinner vaginal lining combined with an inability to negotiate for safer sex and lack of perceived risk for acquiring HIV places older women at an increased risk. Marks et al (2005) concluded that most people reduced their risk of transmitting HIV to others once they became aware that they were HIV-positive. PSA testing may represent an opportunity for earlier diagnosis of HIV in older men.

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Title: An Evaluation of the Shop Talk Movement: Community-Driven Colorectal Cancer Awareness and Education in Barbershops and Beauty Salons

Authors: Williams M,¹ Brandt HM,¹ Davis A,² Daguise V,³ Spencer S,⁴ Berger F,² Footman G,⁴ Footman TB.⁴

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Previously Presented At/Published In (if applicable):

Presented at the MUSC Hollings Cancer Center Cancer Symposium and USC Graduate Student Day

Abstract (limit to 300 words):

African Americans in South Carolina are significantly ($p < .05$) more likely to develop and die from colorectal cancer than their white counterparts. In the US, colorectal cancer is the second leading cause of cancer-related death. Trend reports from the Centers for Disease Control and Prevention and the National Cancer Institute indicate that the colorectal cancer mortality rate has been steadily declining since 1975. This decline has been attributed to the use of screening tools that can be used to detect non-cancerous polyps before they turn into malignant tumors. However, the 2006 South Carolina Behavioral Risk Factor Surveillance Survey found that 53% of African Americans over the age of 45 had never had a sigmoidoscopy or a colonoscopy. This indicates that there is a significant need for an increased awareness of colorectal cancer (CRC) and colorectal cancer screening in that population.

Past research suggests that barbershops and beauty salons are ideal places to implement health communication campaigns targeting African Americans. Using barbers and hairstylists to deliver information about colorectal cancer and colorectal cancer screening is a novel approach. The goals of the Shop Talk Movement are to develop targeted messages to appeal to the interests and values of stylists and their clients utilizing a variety of communication methods, and to train barbers and stylists to infuse colorectal cancer education during natural conversation with clients. The objective of this study is to evaluate the impact of the Shop Talk program on the CRC knowledge and screening activities of barbers and stylists and to assess Shop Talk's programmatic coverage and delivery.

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