

2011 Kellogg Health Scholars Program Annual Meeting

Finishing Scholars (2009-2011 Cohort) Presentations Abstracts

Friday, June 3, 2011

8:45 a.m.-10:45 a.m. National

Moderator: *Carlos Zometa*

Title: *"The Best Distributed Thing in the World": CBPR and the Common Sense of Public Health*

Presenter: *Joshua Garoon, Johns Hopkins School of Public Health*

Community-based participatory research (CBPR) is frequently billed as an approach to public health that is both more effective and more ethical than alternative modes of investigation. This presentation examines those claims in light of the Recovering a Sense of Place: Environment, Community, and Treatment (ReSPECT) for Addiction project. ReSPECT is a one-year participatory ethnographic study. It investigates reactions to the distribution and establishment of local drug treatment services in two Baltimore neighborhoods (Waverly and Better Waverly) with high unmet need for such services. Six residents of the two neighborhoods volunteered to become "artist-researchers." They attended two months of semi-weekly workshops, in which they learned traditional and visual ethnographic research skills. They subsequently interviewed their neighbors on themes of community and neighborhood; crime and safety; and drug use, treatment, and recovery. They drew on the same themes in photographing their neighborhoods. The artist-researchers' interviews, photographs, and observations controvert the "common-sense" notion that residents' resistance to having drug treatment services located near their homes is a straightforward and predictable matter of NIMBYism (where NIMBY stands for "Not In My Back Yard"). They identified the roots of resistance not in their communities' "natural" social exclusion of deviant or dangerous individuals, but instead in residents' complex, multilevel readings of local, state, and national responses to economic decline, changing urban space, drug use, and criminality. These findings encourage the use of CBPR not so much as an approach as an *orientation*, through which scholars work with people to subject their everyday practices to critical scrutiny.

Title: *Environmental and occupational health impacts of concentrated animal feeding operations in North Carolina*

Presenter: *Christopher Heaney, University of North Carolina, Chapel Hill*

Concentrated animal feeding operations (CAFOs) pollute air and water and affect worker and community health. Questions about the safety of fecal waste disposal practices and non-therapeutic antibiotics use in animal production have become common. Although fecal wastes from swine CAFOs can impact surface water quality, traditional microbiological measurements codified in the Clean Water Act fail to provide source-specific information. This deficiency presents problems for organized efforts to change industrial livestock production practices. Antibiotic resistant (AR) *Staphylococcus* species identified in community outbreaks have been linked to swine herds, swine confinement house workers, and the environment surrounding swine CAFOs. An interdisciplinary CBPR partnership was formed to: 1) characterize run-off proximal to industrial hog operations using traditional fecal indicators of water quality and novel fecal source-tracking markers, and 2) compare the prevalence of methicillin-resistant *Staphylococcus aureus* colonization in conventional industrial livestock workers vs. antibiotic-free livestock workers in NC. Results of water quality analyses will highlight strengths and weaknesses of microbial measurement methods. Preliminary results of a cross-sectional study of MRSA in livestock workers will also be presented.

2011 Kellogg Health Scholars Program Annual Meeting

Finishing Scholars (2009-2011 Cohort) Presentations Abstracts

Title: *Individual and social determinants of cancer knowledge and information seeking*

Presenter: *Shelly Hovick, University of Texas, MD Anderson Cancer Center*

Information acquisition is a key determinant of health knowledge and may help individuals take appropriate actions to prevent diseases such as cancer, but those who experience health disparities are often the same people who experience communication disparities or gaps in knowledge, access and exposure to health information. Several theories propose that health communication is an important mediator of the relationship between social determinants and health. However, it is not clear what factors beyond physical access and exposure to health information mediate the effects of individual and social determinants on health communication. Guided by Kahlor's Planned Risk Information Seeking Model (PRISM), we test several proposed mediators of this relationship to examine how factors such as income and race impact social-psychological predictors of cancer information seeking and cancer knowledge. We conducted a national survey (N=1,011) of White, African American and Hispanic participants, 25% with household incomes below \$20,000. Participants completed an online survey assessing demographic and health characteristics, cancer risk perceptions, and cancer information seeking beliefs and behaviors. Descriptive results of cancer communication behavior across the socioeconomic continuum will be presented along with analyses of the relationships between cancer knowledge and socioeconomic status, mediated by social network characteristics, health information access and literacy, subjective norms for information seeking, and perceived information seeking control. Implications for health interventions and policy will be also discussed including techniques for stimulating information seeking to increase cancer knowledge and health protective behavior among those at risk of health disparities.

Title: *Costs of Upward Mobility: Effects of Race, Socioeconomic Position, Social Mobility and Racial Discrimination on Health*

Presenter: *Darrell L. Hudson, University of California, San Francisco*

Rationale: Blacks-white disparities in health are often significantly reduced when statistical models adjust for socioeconomic position (SEP), yet these disparities are not completely eliminated. Is it possible that benefits presumed to be derived from increased socioeconomic position (SEP) are undermined by racial discrimination?

Methods: Using data derived from the Coronary Artery Risk Development in Young Adults (CARDIA) study, we examined the relationship between a cumulative SEP measure and intergenerational social mobility on depressive symptoms and self-rated health. We used parental education and occupation along with respondents' highest level of education and occupation to create two frameworks of life course SEP. An accumulation of risk framework was used to create a cumulative SEP score based on father's education along with respondents' education and occupation. We also used a social mobility framework based on father's education and respondent occupation and created categories to designate intergenerational social mobility trajectories (e.g., low parental SEP/ high adult SEP).

Results: We observed an inverse association between greater levels of SEP with both depressive symptoms and self-rated health. We then examined whether the relationship between SEP and health was negatively affected by racial discrimination for both blacks and whites. We found a significant interaction between SEP and racial discrimination for depressive symptoms and self-rated health among black and white respondents. First, there was a positive relationship between racial discrimination and depressive symptoms, but only among blacks and whites with greater levels of SEP. Second, there was a significant interaction between SEP and racial discrimination such that blacks and whites with greater

2011 Kellogg Health Scholars Program Annual Meeting

Finishing Scholars (2009-2011 Cohort) Presentations Abstracts

levels of SEP reported poorer self-rated health. Looking at intergenerational social mobility, we found that upward social mobility (moving from low to high) was associated with fewer reports of depressive symptoms and better self-rated health. However, we were unable to make any meaningful comparisons between race, social mobility and health because of low sample sizes in some social mobility categories across race.

Conclusions: The findings produced by this study indicate that health benefits presumed to accompany improvements in SEP could be undermined by experiences of racial discrimination for blacks and whites. Future research efforts should be made to examine the relationship between social mobility and health in longitudinal datasets that have larger samples, which would enable a race by social mobility comparison. Future efforts must also examine whether individuals' perceptions and experiences of racial discrimination at the interpersonal and structural levels limits their ability to acquire human capital as well as their advancement in education and occupational status. The results of this study underscore the insidious nature of racial discrimination and crystallize the importance of considering racial discrimination as a critical social determinant of health.

Title: *The Heshima (Respect) Project: A Mixed-Method CBPR Study Exploring the Sexual and Reproductive Health of African American Female Adolescents in Baltimore City*

Presenter: *Shalon M. Irving, Morgan State University*

African American adolescent females are at an increased risk for a myriad of sexual and reproductive health issues including HIV, STIs, and unplanned teenage pregnancy relative to their White and Latina counterparts. The increased risk of infection and other consequences of early sexual involvement are magnified by the relative deprivation and disorder of many urban environments. The extant research has not fully explained the reason for these continued disparities in the sexual health of minority female adolescents. Thus, the need to explore their sexual health behaviors and the potential compensatory mechanisms or protective factors is paramount to the development of effective strategies to reduce the disparities in infection rates and unplanned pregnancy.

The Heshima (Swahili for Respect) Project was developed to further explore the correlates of sexual involvement for African American female adolescents (age 13-24) in Baltimore City. The concept for the project was based on findings from a series of discussion sessions conducted by Sisters Together and Reaching (STAR), Inc. at a local high school and findings from evaluations conducted at the *Sex, Lies, and the Ugly Truth Youth Conference*. As a result of the community feedback received, the need to explore in greater depth the sexual behavior of adolescent females and the role of parents and other supportive individuals was identified.

The Heshima Project is a mixed-method CBPR study which included an 85-item quantitative survey conducted at multiple sites in Baltimore City between November 2010 and March 2011 (N=158) and a photovoice project. The survey included questions on sexual behaviors, relationship with parents and other adults, STI and pregnancy history, emotional health and self-esteem. At the completion of data collection, a subset of the quantitative sample was selected and invited to participate in the photovoice project. Six young women (ages 14-19) participated and explored themes such as family dynamics, health, and community over seven weeks.

2011 Kellogg Health Scholars Program Annual Meeting

Finishing Scholars (2009-2011 Cohort) Presentations Abstracts

Preliminary findings suggest that the majority of adolescents in the sample were sexually active (79.75%) and many reported experiencing regret regarding their decision to have sex for the first time (46%). With relative consistency, however, reporting supportive adult relationships was associated with positive outcomes including older age at sexual debut, decreased feelings of regret regarding sex, and fewer sexual partners. Findings from the photovoice project also illustrate the importance of adult support — in particular from mothers — to the sexual and emotional health of adolescent females. Future research should explore the utility of incorporating parents into sexual health intervention strategies for adolescents.

10:50 a.m.-12:50 p.m.

National

Moderator: *Tricia Miranda*

Title: *School year length and disability in later life: An empirical example of the health impact of educational policy*

Presenter: *Sze Liu, Harvard School of Public Health*

Recently, many school districts have or are considering shortening the academic year as a response to the recession and state budget crisis. For example, 16 of California's largest school districts reduced the number of days in the 2010 academic year affecting 1.4 million students. A shorter academic year may have a negative impact on both short and long-term academic and health outcomes. However, to date, there is limited research on this topic. This project uses Census microdata merged with historical information on the average number of days in a school year to examine the long term impact of school length on adult income and disability status. Limitations will be discussed. Furthermore, we will discuss how this is just one empirical example of the health impact of educational policy.

Title: *A Concept Mapping Exploration of the Neighborhood Context and its Influence on Pregnancy Among Community-Based Doulas and Mothers*

Presenter: *Jessica Burke (primary mentor) for Dara Mendez, University of Pittsburgh*

There are persistent racial disparities in perinatal health outcomes such as infant mortality, preterm birth (PTB), and low birth weight (LBW). Although research has identified a range of factors such as stress, access to health services, and socioeconomic status that contribute to adverse perinatal outcomes, little is known about what contributes to disparities. Research studies and some theoretical models posit that neighborhood and community contexts have been linked to adverse birth outcomes such as preterm birth and low birth weight. However, the exact factors and mechanisms linking neighborhood context and birth outcomes and disparities in these outcomes are not well understood. The purpose of this study was to explore the conceptualization and relationship of neighborhood context with preconceptional health, pregnancy health, postpartum health and birth outcomes among a group of community-based doulas and mothers. For this research, we worked with the Birth Circle, a community-based doula program that provides doula services to low income pregnant women through a medical assistance insurance program. Community-based doulas are trained lay women from the community who provide several services, including labor and delivery support, childbirth education, nutrition education, and breastfeeding support. The Birth Circle provides services to over 300 women per year. We used concept

2011 Kellogg Health Scholars Program Annual Meeting

Finishing Scholars (2009-2011 Cohort) Presentations Abstracts

mapping, a participatory research method, to explore perceptions of the neighborhood context and its influence on pregnancy health among doulas and mothers. This presentation describes the procedures and the results from the first two concept mapping sessions. During the first session, we conducted a brainstorming activity where participants answered the question, "What are characteristics of the neighborhood (good or bad) that are relevant for pregnancy health (before, during and after pregnancy)? During the second session, we conducted a sorting and rating activity, where participants reviewed the neighborhood items from the first session and sorted them according to their similarities and rated them in relation to their importance for preconceptional, pregnancy and postpartum health, and birth outcomes. Results from this study will be helpful in determining important community and neighborhood factors that can be used for future Birth Circle program development as well as other interventions relevant to pregnancy and birth.

Title: *Conducting CBPR with Youth: Transforming Educational and Health Disparities*

Presenter: *Jessica Ruglis, Johns Hopkins School of Public Health*

School dropout is one of the nation's greatest public health issues. Rooted in place, this educational crisis is disparate by race/ethnicity, class, gender and geography. 68.8% of all US students graduate, and while 80.7% of White and 76.6% of Asian students do, only 55.5% of Latino, 53.7% of Black and 50.7% of American Indian students finish. 66.0% of males graduate versus 72.9% of females. The Class of 2010 alone is predicted to produce 1.3 million non-graduates, or 7,200 students per day. A mere 25 school of the largest districts in the nation, all "majority minority," produce one-fifth of the entire nation's dropouts, or 250,000 young people per year. Education is not only a central component of socioeconomic status and its gradient of health disparities; it is an independent predictor of life expectancy, morbidity and mortality. Like the social gradient of health, there exists a parallel educational gradient. Baltimore City not only consistently ranks amongst the lowest graduation rates in the country and in achievement compared to the rest of its state, its largest disparity in mortality is by education level – trumping even racial disparities in a city historically imbued with racial subjugation and poverty. For every 100,000 residents in 2008, 1,950 people with high school education or less died compared to 735 people with a bachelor's degree or higher

This presentation will report on the results of the *process* of conducting a mixed method, community based participatory research with young people (ages 15-29) in Baltimore City, and its policy and disciplinary implications. ProjectDISH (Disparities in Schooling and Health): Baltimore is an intergenerational youth research collective investigating the ways in which the educational experiences students have in one of these worst performing school districts – these epicenters of the graduation rate crisis – are related to adolescent and lifecourse health disparities. Using qualitative, quantitative and psychophysiological research methods in an exploratory study of schooling experiences and policy that function as stressors and social determinants of health, this study aims to contribute to health disparities research by expanding the pathways and models by education (attainment/level) is linked to health. This presentation will report on the process of developing this research project and training youth to participate in research. It will present on the six-week long 2010 Summer Youth Employment Research Institute and year-long weekly research meetings. Policy implications and lessons learned for conducting interdisciplinary, health disparities community based participatory research with young people is discussed.

2011 Kellogg Health Scholars Program Annual Meeting

Finishing Scholars (2009-2011 Cohort) Presentations Abstracts

Title: *Do residents of food deserts express different food buying preferences compared to residents of food oases? A Mixed-methods analysis*

Presenter: *Renee Walker, Harvard School of Public Health*

Many people lack access to food stores that provide healthful food. Neighborhoods with poor supermarket access have been characterized as "food deserts" (as contrast with "food oases.") We used the mixed-methods approach of concept mapping to explore factors influencing food buying practices among residents of food deserts versus food oases in Boston, MA. Concept mapping allows participants to identify, list, and organize their perceptions according to importance. Resulting maps visually illustrate priority areas. Sixty-seven low-income adults completed the concept mapping process that identified 163 unique statements (e.g. relating to affordability, taste, and convenience) that influence food buying practices. Multivariate statistical techniques grouped the 163 statements into 8 clusters or concepts. Results showed that average cluster ratings and rankings were similar between residents of food deserts and food oases, suggesting that any differences in the nutritional practices of residents in food deserts versus food oases are not primarily driven by consumer preferences.

Title: *The Role of Faith-Based Organizations in Adolescent Sexual Decision-Making*

Presenter: *Terrinieka Williams, University of Michigan*

Understanding adolescent sexual decision-making is vital for intervention efforts aimed at promoting adolescent health. Faith-based organizations (FBOs) are a promising vehicle to help youth understand religious and cultural beliefs about sex and sexuality. This study explored African Americans' perceptions of the role FBOs may play in adolescent sexual decision-making. Nineteen adults participated in two focus groups and 30 adolescents participated in four focus groups at two predominantly African American FBOs. Participants were asked about the messages they hear about sex in church as well as current and desired sexual health resources available in their FBOs. Using a constant comparative approach, we found that adults mentioned having regular discussions with their children about sex, relationships and sexuality, but youth said the conversations are infrequent and consisted of the same message (e.g., do not have sex before marriage, premarital sex is wrong, homosexuality is a sin). Despite these differences, both adults and adolescents believed that FBOs could increase their influence on adolescent sexual decision-making by forming a support system for youth through activities that include a broader discussion about sex (e.g., abstinence, contraceptives, and emotional aspects of sex). Participants also acknowledged the advantages (e.g., ability to learn from others) and disadvantages (e.g., feelings of shame and guilt associated with discussing premarital sex) of using FBOs as venues to discuss sexual health. Findings suggest that FBOs might increase their influence on adolescent sexual decision-making by discussing a broader range of sexual health topics and offering more practical resources to support adolescent decision-making. Implications for research, practice and policy are discussed.