Session V: Homeless & Vulnerable Youth

24. An Intervention to Enhance Psychological Capital in Homeless Females: Preliminary Findings
Lynn Rew, MSN1; Sanna Thompson, PhD1; Adama Brown, PhD1; Eunjin Seo, MSN1
1The University of Texas at Austin

Purpose: Homeless young women ages 18-23 years are the most vulnerable of unstably-housed youth. They are prone to sexually transmitted infections, unplanned pregnancies, and substance use/abuse. The study aim was to determine feasibility and preliminary efficacy of a 4-session intervention delivered at a drop-in site. We wanted to explore differences in indicators of psychological capital between participants in the intervention and those in an attention control group immediately following the intervention and 4 weeks later.

Methods: Following IRB approval and written informed consent, 43 eligible homeless young women enrolled in the study (26 intervention and 18 control group; average age = 21.2 years; 45.5% White, lived away from home approximately 57 days). The intervention and control condition were led by two sets of female group facilitators (one nursing student and one social work student) trained by the investigators to follow a manual with content and strategies to enhance psychological capital (intervention) and street health resources (control). Data were collected using valid scales (Cronbach’s alpha = .78-.96) by two other students at three times: prior to start-up of either group, immediately following the completion of the 4 sessions, and at a follow-up date 4 weeks later. Following the 4 sessions, participants in both intervention and control groups were each given a cell phone to use for the 4-week period between the second and third data collections. The purpose was to encourage those in the intervention to meet their goals and to remind those in the control group that we would collect data one more time. Each participant received a total of $45 for providing data at all three collections.

Results: A statistically significant time effect was found in measures of hope (p < .001), resilience (p = .016), future time perspective (p = .025), safer sex behaviors (p < .043), and psychological capital (p = .034), over time, with intervention group participants showing significant improvement in hope (p = .012) and social connectedness (p = .028), and non-significant, but improved, self-efficacy to negotiate safe sex (p = .066). Although scores on self-efficacy to refuse alcohol also increased from baseline to times 2 and 3, a statistically significant time effect was not found. A time by group effect was found for resilience (p = .062) and optimism (p = .081), approaching significance.

Conclusions: To our knowledge, this is the first intervention for homeless youth based on a Positive Psychology paradigm. The significant preliminary intervention findings, despite the small sample size, are encouraging because they indicate that a brief group intervention delivered in a drop-in center may influence young women to enhance their psychological capital. Positive changes in psychological capital that include positive attitudes about the future can contribute to future healthy behaviors and quality of life.

Sources of Support: Supported by R21NR013538 from the National Institute of Nursing Research/National Institutes of Health, awarded to the first author.
Parenthood, Motivation, and the Desire to Change in Homeless Older Adolescents  
Charles G. Rogers, MD¹; Suzanne Fegley, PhD²; Sharon Ravitch, PhD²; Kenneth Ginsburg, MD, FSAHM¹; Carol A. Ford, MD, FSAHM¹  
¹The Children's Hospital of Philadelphia; ²University of Pennsylvania

Purpose: Parenthood in the context of homelessness during adolescence remains a poorly understood phenomenon. The present study explores the subjective meaning and role of parenthood in the lives of homeless older adolescents.

Methods: An individual interview-based, qualitative study was undertaken with English speaking mothers and fathers, age 18-22, living in a full-service homeless shelter in Northwest Philadelphia. Interviews were digitally record and transcribed verbatim. Transcripts were coded and analyzed utilizing standard qualitative methodology, and analyzed using a conceptual framework shaped by Spencer's Phenomenological Variant of Ecological Systems Theory (1995). Validation was established via peer-review and youth participant review. Atlas.ti v.7 was used in coding and analysis.

Results: Thirty parents (15 mothers /15 fathers) participated in interviews ranging from 30-150 minutes in length. Eighty percent described their race/ethnicity as "Black" or "African-American," and 10% described themselves as "Hispanic." Approximately 45% had completed high school or a GED. Two-thirds of the mothers and 1 father were living with their child. While individual history deeply shaped these narratives, all of the participants explicitly identified parenthood as the central motivating force leading them to seek positive changes in their lives. The participants discussed how, prior to becoming parents, they engaged with their environment and its stressors, in what they referred to as participating in “street life,” through activities such as substance use, fighting/aggression, dropping out of school, and participation in the informal economy. Upon accepting their role of parents, whether the pregnancy was initially desired or not, these young people reported that they felt strong motivation to change their actions and their ways of approaching the world. Specific areas of active change implemented by these parents included: entering the shelter, developing coping strategies to deal with anger and aggression, and reducing or stopping substance use. They also discussed areas in which they desired further changes including: leaving the informal economy to enter the formal economy, returning to school, locating stable housing, and finding ways to give back to their communities. All of the participants stated they were motivated to enact these changes by the desire to provide a better future for themselves and for their children.

Conclusions: For these homeless older adolescents, parenthood can be seen as motivating them to shift from maladaptive to more adaptive strategies for managing their lives and responding to environmental stressors. While further research is needed to evaluate the outcomes of this motivation to change, this study suggests how parenthood might play a constructive role in the lives of these young people. Furthermore, while fully cognizant of the deleterious effects of adolescent parenthood, conceptualizing parenthood as providing motivation for change enriches the complex conversation around adolescent parenthood in these homeless youth. Partnering with these young parents in their desires to change their lives might allow healthcare and social services providers to support them in actualizing and sustaining these adaptive changes, and provide a better future for themselves and their children. Future research in this area is warranted.

Sources of Support: Funding provided by The Craig Dalsimer Division of Adolescent Medicine
26. Behavioral and Structural Determinants of HIV Infection Among Street Boys in Kisumu, Kenya
Ariella Sara Goldblatt, BA1; Zachary A. Kwena, MA2; Jessica Lin, MPH3; Kawango Agot, PhD4; Elizabeth Anne Bukusi, PhD2; Colette (Coco) Auerswald, MD, FSAHM3
1UC Berkeley UC San Francisco Joint Medical Program; 2Kenya Medical Research Institute (KEMRI); 3University of California, Berkeley; 4Impact Research and Development Organization

Purpose: Street children and youth (SCY) are at increased risk for HIV infection in developed countries and in South America, but there little research exists from East Africa about the prevalence and risk factors for HIV infection in this often neglected population. We examined the risk factors for HIV infection among SCY in Kisumu, Kenya.

Methods: A sample of SCY stratified by age was recruited by street outreach over a two-week period. Participants were eligible if they were 13-21 y.o. and living and working on the street. SCY completed a computer-assisted, interviewer-administered survey, followed by voluntary HIV counseling and testing. Survey items included demographics, homelessness history, survival activities, sexual behavior and substance use. Analyses were performed using STATA SE/12.1. Fisher exact tests were used to determine bivariate associations of predictor variables with HIV status. A p-value<0.1 was considered significant. The association between significant predictor variables and HIV status was explored by logistic regression controlling for age.

Results: The sample of 296 males was 28% 13-15 y.o., 38% 16-18 y.o., and 34% 19-21 y.o., and was 68% of Luo ethnicity, 27% Luhy and 5% other. 72% had been on the street for at least one year. Survival activities included garbage picking (56%), helping market vendors (55%), begging (17%), being a porter (47%), being a houseboy (4%), and other survival activities (23%). 80% of participants reported ever having vaginal sex. 6% of participants reported ever having insertive anal sex and 8% reported ever having receptive anal sex. 8% of the sample reported transactional sex. 50% of participants reported at least weekly use of alcohol, 45% glue, 34% marijuana, and 5% fuel.12 (4.04% (95% CI 2.32-6.92) participants tested positive for HIV. Of participants who tested HIV positive, all had been on the street for at least one year (p=0.077) and had engaged in vaginal sex (p=0.135). Both engaging in insertive anal sex (OR=11.70, p=0.000) and receptive anal sex (OR=4.89, p=0.030) were associated with HIV infection, as was inhaling fuel weekly or more (OR=4.70, p=0.070). Helping vendors in the market (OR 8.07, p=0.048) and working as a houseboy (OR 6.68, p=0.029) were significantly associated with HIV infection.

Conclusions: Among SCY in Kisumu, structural factors including length of time on the street and certain survival activities such as helping market vendors and working as a houseboy, are associated with testing positive for HIV. Risk behaviors associated with HIV infection include frequent fuel inhalation, vaginal sex, and both receptive and insertive anal sex. These findings offer opportunities for structural and behavioral interventions to prevent HIV infection of SCY in Kenya.

Sources of Support: UC Berkeley Center for Global Public Health, UCB-UCSF Joint Medical Program Albert Brodie Smith and Margaret Gretchen Smith Scholarship, and the UCSF Department of Pediatrics.
27. Rates of Cardiovascular Risk Factors and Other Chronic Health Outcomes Among Young Adults Formerly in Foster Care in Comparison to Economically Insecure and Secure General Population Young Adults.

Kym Ahrens, MD, MPH¹; Michelle Garrison, PhD²; Mark E. Courtney, PhD³

¹Univ of Washington/Seattle Children's Hospital & Research Institute; ²Seattle Children's Research Institute/University of Washington; ³University of Chicago

Purpose: Foster youth are known to have high rates of chronic and/or untreated health conditions upon entrance into the foster system, as well as during their stays in out-of-home care. However little work has been done to determine whether young adults who emancipate from foster care are vulnerable to increased health problems once they transition to adulthood. Our objective was to evaluate rates of several cardiovascular risk factors and other chronic conditions among young adults formerly in foster care in comparison to two groups of general population peers – those who were exposed and non-exposed to economic insecurity.

Methods: We examined data from two time-points (baseline at late adolescence, and follow-up at age 25-26 years) in two longitudinal cohort studies: 1) the Midwest Evaluation of the Adult Functioning of Former Foster Youth, and 2) an age-matched sample from the National Longitudinal Study of Adolescent Health (Add Health). Analyses compared self-reports of cardiovascular risk factors (dyslipidemia, hypertension, diabetes, and smoker) and chronic health conditions (Attention Deficit Hyperactivity Disorder, asthma, and seizures) between the foster care sample (N=596), and those of the Add Health sample with (N=456) and without (N=1461) baseline economic insecurity. Multiple regression models were created, and all analyses controlled for potential confounders, including gender, race and ethnicity, age, educational attainment, and follow-up self-report of economic insecurity. The economically secure group was treated as the reference group.

Results: Young adults formerly in foster care had higher rates of all conditions except dyslipidemia when compared to the economically secure reference group (significant ORs ranged from 3.41-30.57). The relationship with diabetes was borderline (p=0.06); we were also unable to evaluate the relative odds of seizures due to the fact that there were no reports of this condition in the economically secure category. In contrast, the economically insecure group had only two outcomes for which odds were significant when compared to the reference group (having asthma and being a smoker; ORs 2.32 95% CI [1.11, 4.83] and 1.81 95% CI [1.40, 2.34], respectively). Overall, except for dyslipidemia a consistent pattern emerged of higher odds ratios in the former foster youth group than in the economically insecure group, when both were compared to the reference group.

Conclusions: Youth in foster care appear to be at higher risk of cardiovascular risk factors and other health conditions, above and beyond that which is afforded by exposure to economic security. Young adults who have emancipated from foster care should be a high priority group when state and federal governing bodies are considering the implementation of policies to extend medical care/coverage, as well as when other interventions focusing on reducing health disparities in young adulthood are implemented.

Sources of Support: The principal investigator was supported by NIH K23 award 1K23MH90898 and a New Investigator Award from the University of Washington Center for AIDS Research. The parent study was conducted with funding from the William T. Grant Foundation and the Illinois, Wisconsin, and Iowa state human services departments.
28.
Impact of the School Environment on Retention in Care Among HIV-Positive Youth in Kisumu, Kenya
Hilary T. Wolf, MD; Bonnie Halpern-Felsher, PhD, FSAHM; Elizabeth A. Bukusi, MD, MPH, PhD; Craig R. Cohen, MD, MPH; Colette L. Auerswald, MD, FSAHM

1Medstar Georgetown University Hospital; 2University California, Berkeley; 3FACES-KEMRI

Purpose: Youth represent 40% of all new HIV infections in the world, of which 80% live in sub-Saharan Africa (SSA). In Kisumu, Kenya up to 57% of HIV+ youth may become lost to follow-up (LTFU) from care, placing them at increased risk for HIV-related morbidity and mortality. School going youth in SSA spend the majority of their time in school. We therefore explored the impact of the school environment on clinic retention among HIV positive youth in Kisumu, Kenya.

Methods: Qualitative data were collected in three stages. (1) Two Focus groups (FGs) (n=18) were conducted with community health workers and HIV+ peer educators who work with LTFU youth. (2) Twenty-seven semi-structured interviews were conducted with HIV+ youth (15-21 years old) who had not received HIV care in four months or greater. (3) Ten in-depth interviews were conducted with educators selected from schools attended by LTFU interview participants. The domains of inquiry for all three stages explored school related barriers to following-up in HIV-care, the impact of the school environment on clinic retention, and possible school interventions to reduce LTFU. Transcripts were coded and analyzed employing grounded theory.

Results: There were five types of school-related barriers to follow-up. The majority of the barriers were influenced by HIV-related stigma in school. 1) Stigma & discrimination: HIV+ students experienced internalized stigma, perceived stigma, enacted stigma and discrimination in schools. 2) Disclosure: HIV+ students did not disclose their HIV status because they feared that the information would not be kept private and that teachers and peers would stigmatize them based on their HIV status 3) Educator beliefs: Educators lacked correct information about HIV, preventing HIV-positive students from feeling comfortable speaking to educators about personal issues. At times educators propagated stigmatizing beliefs about HIV that further isolated HIV+ youth. 4) School demands: Students did not attend their clinic appointments because of conflicting academic obligations, such as exams. 5) School excusal: Getting permission from school to attend clinic was difficult especially when school officials were not aware of a student’s HIV status. Possible interventions proposed by participants included: 1) School education programs for teachers and students regarding HIV/AIDS and HIV-related stigma; 2) linkages between healthcare programs and schools to coordinate clinic appointments with school demands 3) formation of HIV-related school clubs to reduce HIV-related stigma; and 4) implementation of feeding programs that provide HIV-positive students with nourishment while in school to aid with adherence to anti-retroviral therapy.

Conclusions: Many of the determinants of LTFU among HIV+ youth were related to stigma, which often was connected to reasons for lack of disclosure. Interventions focusing on reduction of stigma and increased disclosure of HIV status to trusted educators may improve HIV+ youth’s retention in care.

Sources of Support: This research was supported by a UCSF Reproductive Infectious Disease Fellowship (5T32AI065388-05), Roy Rodriguez AIDS Fellowship Research Fund, and a GloCal Health Fellowship (1R25TW009343-01)
29. Psychosocial Predictors of Adolescent Sexual Risk Behavior: A Quasi-Experimental Analysis in a Nationally Representative Sample of American Youths
Kelly Donahue, PhD\(^1\); Carol Van Hulle, PhD\(^2\); Joseph L. Rodgers, PhD\(^3\); Brian M. D'Onofrio, PhD\(^4\)
\(^1\)Indiana University School of Medicine; \(^2\)University of Wisconsin; \(^3\)Vanderbilt University; \(^4\)Indiana University

**Purpose:** Previous studies have reported associations between psychosocial adjustment in childhood and sexual risk behavior during adolescence. While it is possible that exposure to these risk factors directly increases the likelihood of engaging in sexual risk behavior, an alternative explanation is that the observed associations between these variables are driven primarily by unmeasured confounds. We used a combination of quasi-experimental designs to examine whether these observed associations may be explained by genetic and environmental confounds not fully accounted for in previous research.

**Methods:** Participants were drawn from the Children of the National Longitudinal Survey of Youth, a longitudinal, nationally representative, and genetically informative sample in the United States (N = 7,743). Using a sibling comparison approach, we tested whether associations between measures of childhood psychosocial adjustment (i.e., early dating, substance use, and emotional and behavioral problems) and adolescent sexual risk behavior (i.e., early age at first intercourse and number of past-year sexual partners) remained after controlling for confounds shared by full siblings and maternal half siblings who differed in their exposure to each risk factor. Next, using quantitative genetic modeling, we also estimated the extent to which these associations were attributable to shared genetic, shared environmental, or nonshared environmental influences.

**Results:** In unadjusted analyses, each risk factor was significantly associated with greater likelihood of each measure of sexual risk behavior. The effects of nearly all predictors remained significant after controlling for measured covariates and after controlling for unmeasured familial influences shared by siblings, consistent with a causal influence. In contrast, our quantitative genetic models suggested that these associations were largely due to familial confounding, while the association between early dating and sexual risk behavior was attributable to shared genetic influences plus environmental influences specific to early dating. This pattern of findings suggests that even accounting for shared genetic and environmental influences using a sibling comparison approach—a rigorous alternative to traditional methods—may not provide sufficient control over potential confounds.

**Conclusions:** Common genetic and environmental influences may increase both the likelihood of exposure to psychosocial risk factors and of engaging in sexual risk behavior. Studies unable to adequately account for these confounds may provide misleading support for a direct relationship between these variables. Our results suggest that prevention strategies aimed at reducing adolescent sexual risk behavior might need to address broader risk factors that contribute to both behavior problems and a greater likelihood of sexual risk behavior. Additionally, early involvement in dating relationships may represent a causal risk factor for both early age at first intercourse as well as an increased number of sexual partners during adolescence.

**Sources of Support:** F31DA029376, R01HD061384, R01HD065865