Idleness as a Risk Factor for Increased HIV Infection in Young MSM (YMSM)

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Purpose: HIV disproportionately impacts young men who have sex with men (YMSM), particularly black YMSM. Previous research on racial/ethnic disparities of HIV among YMSM has focused on individual-level behaviors and recently, on macro-level factors, such as racism, poverty, and social networks. Studies have shown that individual-level behaviors, alone, cannot explain persistent racial/ethnic disparities in HIV sero-prevalence among YMSM. As a result, we introduced a new construct, “idleness” not yet explored regarding its relationship to HIV among YMSM. The purpose of this study was to investigate a potential relationship between idleness and HIV+ status or other sexually transmitted infections (STI), as well as examine the association between idleness and other negative health behaviors commonly associated with HIV acquisition, such as binge drinking, drug use and unprotected sexual intercourse.

Methods: Data were collected from the baseline sample of Crew 450, an ongoing longitudinal cohort study of YMSM (ages 16-20) recruited from Chicago beginning in 2009 (N=450). The outcomes of interest included binge drinking, marijuana use, and sexual risk behavior. HIV status was obtained by either self-report (N=6), or OraSureTM confirmatory testing, whereas, STI (gonorrhea and/or chlamydia) diagnosis was determined by urine PCR. For the purposes of this study and due to the developmental age of study participants, idleness was defined as unemployed and not enrolled in school. We controlled for the effects of age and race/ethnicity for outcomes associated with idleness in bivariate analyses (p < 0.05). Significant bivariate relationships informed multivariable logistic regression models that predicted the likelihood of an HIV positive status. Sensitivity analyses for black participants were conducted given disproportionate rates of HIV among these young men.

Results: Thirty-four participants were HIV-positive; 82.3% previously undiagnosed. Additionally, 36 participants tested positive for an STI. Of the study sample (N=450), 18.2% of participants were “idle”. Black MSM were 53.4% of the total sample, yet represented 69.5% of those idle. Bivariate analyses showed idle YMSM as more likely to be HIV positive , STI positive, binge drinkers and regular marijuana users (p<0.05). Adjusted for age and race/ethnicity, idle YMSM were more likely to binge drink (OR=2.32; 95% CI=1.14, 4.69) and be HIV positive (OR=2.19; 95% CI=1.01, 4.72). Among black participants similar associations (OR of binge drinking= 2.92; 95% CI=1.07, 8.01; OR of HIV positive=2.38; 95% CI=1.03, 5.51) were reported. In multivariable logistic regression models predicting the likelihood of an HIV positive status, controlling for substance use, the association between idleness and HIV positive remained significant (OR=2.31; 95% C=1.06, 5.07). The association was also significant for black participants (OR=2.49; 95% CI=1.06, 5.87).

Conclusions: Idleness is significantly associated with HIV status (primarily previously undiagnosed cases), suggesting that this construct may contribute to HIV infection among YMSM. This is especially significant for black YMSM, who were both disproportionately idle and well-known to have higher rates of HIV than their peers. Further exploration of “idleness”, specifically with longitudinal analyses among YMSM. “Idleness” presents a new, somewhat provocative target area for structural interventions around employment or education that may alleviate the persistent burden of HIV among YMSM.

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The Use of Condoms and Dental Dams During First Same-Sex Sexual Experiences (SSE) of Adolescent African-American Men Who Have Sex With Men

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Purpose: Despite high rates of HIV among AA young men who have sex with men (YMSM), there is lack of data about condom use during first same-sex sexual experience (SSE) and how such behavior may promote future condom use and non-use. High rates of HIV in this population suggests that research focused on condom use/non-use would satisfy a great need to understand whether these early SSE impact risk for HIV acquisition. The purpose of this study is to understand what behaviors AA YMSM describe during first consenting SSE and how youth describe condom use and non-use.

Methods: In-depth one-on-one interviews were conducted with 25 AA YMSM 15-19 years old recruited from three city clinics and through outreach and flyer distribution at community organizations/events serving LGBT youth, social media (Facebook, Jack’d), and snowball sampling technique to complete a 1.5 hour interview. Interviews were transcribed verbatim. Two coders independently coded the interviews. Coding continued until consensus was met. Data analyzed using categorical and contextualizing analytic methods.

Results: Most first experiences included participation in oral-penile sex or both oral-penile and penile-anal sex. Few youth described oral-anal sex during first experiences. Youth universally described condom non-use with oral-penile sex because of lack of social acceptance to condoms use during oral sex, negative attitudes towards use (bad taste, feels like a balloon), and acceptance that other behaviors (spitting ejaculate) replaces risk. Youth who described oral-anal sex described non-use because of lack of knowledge of dental dams.

Among penile-anal sex, we found that condom use was influenced by individual, dyadic (partner) and community level factors. Individual factors: prior medical condition, strong self concept, family member with HIV, and positive feelings towards condoms were associated with use, while negative feelings toward condoms, lack of knowledge and limited access were associated with non-use. Partner and community (mother, provider, older sibling influence) modified use and non-use with condoms. Partners: some partner behavior (condoms readily available, desire to stay safe) promoting use, while other behavior (couples testing, trust) promoting non-use; and community: mothers, providers and older siblings were seen as key members of the community that encouraged condom use, while friends sometimes encouraged non-use for improved sensation during sex.

Conclusions: These interviews represent an early step in understanding the first sexual experiences of young AA males. Behaviors, knowledge and attitudes toward protection directly impact use of protection during early same-sex experiences, but this was modified by partner factors and community encouragement from family, providers and adult mentors.

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8. The Role of Sexually Explicit Material (SEM) in the Sexual Development of African American Young Men Who Have Sex With Men (AA YMSM)
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Purpose: Youth may use SEM (print, video and Internet) to supplement school- and family-based sex education and as models for sexual behaviors. Even comprehensive sex education gives little attention to sexual relations of YMSM, especially for those of color. We describe the role SEM plays in the sexual development of a sample of AA YMSM.

Methods: 31 AA YMSM (ages 15-19 years) were recruited (with advertisements in clinics, on social networking sites and LGBT organizations, and with snow ball sampling) to a 90-minute, semi-structured interview. Interviews transcribed verbatim and analyzed using inductive open coding such that emergent concepts were connected across interviews to develop major themes.

Results: Mean age was 18.1 years. Most participants (N=21, 68%) identified as gay. Over 58% (N=18) reported not being in a dating or romantic relationship. The median number of partners in the prior 6 months was 3.0 (range 0-32). Most participants (77%, N=24) described using SEM prior to their first same-sex sexual experience. Youth more commonly described using video or Internet-based SEM over print material. Older siblings, stepfathers, friends or sexual partners often introduced video SEM. One-third of youth described first SEM experiences with SEM focused on male-female partners, with subsequent use of male-male SEM. The primary function of SEM use was to learn about sex, including same-gender sex because of limited information available in other settings, including schools. SEM also served multiple secondary functions: 1) to develop sexual identity (e.g., by being aroused by male-male sexual interactions or by lack of arousal to sexual depictions of women); 2) to understand sexual roles and responsibilities (e.g. learning to perform as a “top” or as a “bottom”); 3) by introducing sexual performance scripts (e.g. condom use/non-use, sexual gestures and sounds, sexual positions); 4) cues to readiness for sex; and 5) models for how sex should feel (e.g. pleasure and pain). Youth described changing sexual practices based on examples in SEM. We found little evidence that young men used SEM to determine ethnicity of partners selected or to figure out other aspects of identity.

Conclusions: African American young men who have sex with other men use SEM to sort through sexual identity development and as models for sexual performance during initial same-sex experiences. Comprehensive sexuality education programs should be designed to address the unmet needs of YMSM, with explicit focus on sexual roles and behaviors that may be inaccurately portrayed in SEM.

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Exploring the Association between Socioeconomic-related Risk and STI Infection Among African-American Adolescent Females

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Purpose: Research suggests that coping with socioeconomic (SES)-related stressors, which tend to be chronic rather than acute, elicits a cascade of biological responses that are functional in the short term but over time may “weather” or damage systems that regulate the body’s stress responses. Chronic stress has been associated with decreased cellular and humoral immune function and increased susceptibility to infection. While disparities in sexually transmitted infections (STIs) are well-documented, with African-American adolescent females at disproportionate risk, virtually no studies have examined the potential role that chronic stress, particularly the stress associated with SES strain, may play on STI risk. The objective of this study was to examine whether SES-related risk at baseline predicts STI acquisition and reinfection over 36 months of follow-up.

Methods: The analytic sample included 627 African-American female adolescents, ages 14-20 years, recruited from sexual health clinics in Atlanta, GA, who participated in a randomized controlled HIV prevention trial and who returned for at least 1 follow-up assessment. Following baseline assessment, data collection occurred prospectively every 6 months for a total of 36 months. Chronic SES-related risk was assessed as a sum of yes-no exposure to seven risk indicators regarding receipt of family aid and chaotic neighborhood conditions. The primary outcomes were a laboratory-confirmed positive test result for either C. trachomatis or N. gonorrhoeae at one (STI acquisition) or multiple (STI reinfection) follow-ups subsequent to a negative test result or directly observed treatment at the previous assessment. Other factors commonly associated with disparities in STIs such as age, coping, other stressors, mental health, substance use, sexual risk behaviors and prior STI history were assessed and controlled for in multivariable logistic regression analyses.

Results: Among the sample, 236 (37.6%) acquired at least one new STI over the follow-up, and 86 (13.7%) of these women were reinfected over the 36-month period. SES-related risk, age, coping, other stressors, and prior STI were significantly associated with STI acquisition and reinfection in bivariate analyses. In multivariable regression analysis, SES-related risk significantly predicted STI acquisition over 36 months (AOR = 1.22, 95% CI:1.09,1.35) above and beyond these other known correlates of STI acquisition. SES-related risk also independently predicted STI reinfection (AOR = 1.18, 95% CI: 1.02,1.36) in analysis adjusting for other known correlates of STI reinfection.

Conclusions: The findings are consistent with propositions that some health disparities observed in adulthood may be linked to earlier life experiences, particularly experiences associated with low SES conditions which can cause significant chronic strain on an individual, thereby placing them at heightened biological risk for STI. The results also highlight the need for further research elucidating the pathway(s) through which SES-related risk affects later STI acquisition. Understanding ways to optimize STI prevention interventions, such as by including content designed to enhance coping and reduce the effects of stress during childhood and adolescence, may be beneficial for reducing STI acquisition among those with high exposure to SES risk.

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Adolescent Relationship Abuse, Sexual Assault, and Disparities in Sexual Risk by Sexual Orientation Among Female Clients of School-Based Health Centers

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Purpose: Adolescent relationship abuse (ARA) and sexual assault are prevalent among high school aged youth and associated with poor sexual and reproductive health outcomes. Literature has suggested that sexual minority youth are at greater risk for violence victimization and engage in riskier behaviors compared to heterosexual youth. Less is known about lesbian and female bisexual adolescents’ sexual risk behavior, specifically when taking into account histories of ARA and sexual assault. The purpose of this study was to understand whether lesbian/bisexual adolescents seeking care at school-based health centers are at greater risk for poor sexual and reproductive health after accounting for their exposure to ARA and sexual assault to inform potential clinic-based interventions with this population.

Methods: Adolescent females (n=770), ages 14 to 18, seeking services at ten school-based health centers in California completed a computer-assisted survey that served as baseline data for a larger clinical trial. Fisher’s Exact or Wald Log-Linear Chi-Square tests were used to assess differences in outcomes of interest by recent ARA, recent non-partner sexual assault, sexual orientation, and sexual contacts (any same-sex contacts vs. opposite sex contacts only). Adjusted logistic regression models were constructed to assess the relationship of violence victimization and sexual orientation/sexual contacts collectively with sexual/behavior risk outcomes.

Results: Eighteen percent of the sample (n=139) identified as lesbian, bisexual, or questioning (77% bisexual); 13% of the sexually active females (n=74) reported any same sex contacts. In bivariate analyses, lesbian/bisexual females were more likely to report recent sexual assault victimization (21% v 13%; p=0.02), contraceptive non-use (8% v 3%; p=0.01), and STI testing/treatment (16% v 10%; p=0.05). Females who experienced recent ARA were more likely to report all outcomes compared to girls without exposure to ARA. Females who experienced recent sexual assault were more likely to report two or more sex partners in past 3 months, contraceptive non-use, reproductive coercion, and care seeking for STI testing/treatment. In adjusted models, exposure to abuse or sexual victimization remained salient predictors of key outcomes. When controlling for exposure to abuse, lesbian/bisexual females were more likely to report recent anal sex (AOR 1.8, 95% CI 1.002, 3.1), contraceptive non-use (2.9, 95% CI 1.5, 5.6), and STI testing/treatment (1.8, 95% CI 1.2, 2.7). Analyses were replicated using sexual contacts as a predictor with the subsample of sexually active females; disparities in exposure to ARA (26% v 17% p=0.07) widened.

Conclusions: Among this sample of lesbian/bisexual females seeking care at school-based health centers, recent non-partner sexual assault was common. Females who reported any history of same-sex partners were more likely to have recently experienced violence compared to females with exclusively opposite-sex partners. Given the prevalence of violence victimization in this sample, health centers located within schools offer a unique opportunity to reach adolescents experiencing ARA and sexual assault. Asking youth about their sexual attraction or history of sexual contacts may be useful markers to reach adolescents at increased risk for violence and poor sexual health, though universal education about ARA and healthy relationships is indicated.

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11.
The Impact of a Six-week School Curriculum, on Boys' Attitudes and Behaviors Related to Gender Based Violence (GBV) in Kenya
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Purpose: To determine the effect of an educational curriculum designed to raise awareness of social norms underlying gender-based violence (GBV), on attitudes and behaviors of male high school students in urban slums of Nairobi, Kenya, where rates of GBV are high.

Methods: A prospective cohort of 1250 adolescent boys from five slums participated in six two-hour sessions of “Your Moment Of Truth (YMOT)”, an educational curriculum designed to raise boys' awareness of the social stereotypes that promote GBV in Kenya. Data on attitudes and behaviors related to the gender roles of girls and women were collected anonymously at baseline (N=1250), at completion of the course (N=1086) and 6 months later (N=889). At 6-month follow-up, students were asked if they had encountered any situations in which girls or women were being verbally or physically threatened or hurt.

Results: Attitudes towards women improved significantly after the school curriculum and were sustained 6 months later. At baseline, only 42.2% of respondents believed “all women should be treated with respect”. This percentage increased to 79.1% at completion of the course (p<.001) and 79.0% 6-months later, with no significant difference between responses after course completion and 6 months later (p=.96). At baseline, 63.1% of respondents agreed that “if a woman dresses in a sexy dress she is giving permission for men to have sex with her”. This percentage decreased to 14.5% at course completion (p<.001), and 17.8% 6 months later (p<.001 baseline compared to 6 months later, p=0.04 postcourse compared to 6 months later). At baseline, 58.5% of respondents believed that “when a woman says ‘no’ to sex she really means ‘maybe’”. This decreased to 22.8% at course completion (p<.001) and 22.9% 6 months later, with no significant difference between responses after course completion and 6 months later (p=.96).

At 6-month follow-up, 419 of 879 respondents (47.7%) had witnessed a girl or woman being verbally harassed and 327 of 419 (78.0%) had successfully intervened to stop the harassment. Similarly, 408 of 869 respondents (47.0%) had witnessed someone physically threatening a girl or woman and 301 of 868 (34.7%) had witnessed a girl or woman being physically or sexually assaulted. In these situations, 308 of 408 (75.5%) and 222 of 301 (73.8%) who witnessed these events, had successfully intervened.

Conclusions: A standardized 6-week school-based GBV educational program for boys reduced negative sexual stereotypes adolescent boys have towards girls. Changes in attitudes were sustained 6 months after completion of the intervention. On follow-up, nearly half the boys reported witnessing a girl or woman being verbally or physically threatened and a third had witnessed a physical or sexual assault. Three quarters of those witnessing abuse or assault successfully intervened to protect the victim. Such a program has the potential to make an impact on the high rates of sexual assault in the urban slums of Nairobi, Kenya.

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