

Observation period was the time between the age at first sex and the age of last test. Rate was calculated using the total number of CT infections diagnosed over the observational period. Log-linear regression models (assuming a negative binomial distribution) were used to examine the effects of enrollment characteristics of subjects and STI history were used to model the rate of CT infections.

**Results:** A total of 984 CT infections were detected over 2,107 person-yrs for 360 women who reported age at first sex. Twenty-eight percent of subjects remained uninfected, 18.6% tested positive once, 17.2% tested positive twice, and 1% tested positive > 15 times for CT during observation. Sixty-five percent of participants reported age of sexual debut  $\leq$  14 years and 29% reported age of sexual debut between 15-16 yrs. Self reported mean age of first sex for all women was 13.93 yrs ( $\pm$  1.68) and mean age of study enrollment was 15.38 yrs ( $\pm$  1.06). There was no significant difference in rate of CT infection among subjects reporting first sex between 15-16 yrs (0.44) compared to those reporting first sex  $\leq$  14yrs (0.37) or those with first sex at age 17 or older ( $p$  = 0.64). Dropout rate did not differ by infection status at enrollment. There was no significant difference associated with the rate of infection and age at study enrollment. An increased rate of CT infections was associated with being positive for CT at enrollment; however, there was no association for those positive for GC or TV at enrollment.

**Conclusions:** We found no evidence of increased rates CT infections based on age at first coitus. This result is inconsistent with prior suggestions of a biologic susceptibility of younger women. These data suggest that patterns of sexual activity, partner characteristics, specific sexual networks, and use of barrier protection are more important than age at first sex. These data suggest the need to reconsider assumptions about increased biological CT susceptibility among young adolescent women.

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## 5.

### ADOLESCENT DELINQUENCY AND YOUNG ADULT SEXUAL BEHAVIOR AND STI

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**Purpose:** Adolescent delinquency has been associated with increased sexual risk behavior and STD infection. However, the majority of studies assessing this association use cross-sectional data, focus only on adolescent populations and not young adult populations and use very specific populations (ex. incarcerated). Hence, we will explore the longitudinal association of delinquency on young adult sexual behavior/STD in a national sample of youth.

**Methods:** Data were obtained from Waves 1, 2, and 3 of Add Health. Logistic and linear regression analyses were used to assess *Delinquency* (7-items; total score from Waves 1, 2, and 3) on Wave 3 outcomes: STI infections (*C trachomatis*, *N gonorrhoeae*, and *T vaginalis*), *Sexual Intercourse* (# over 12 mos), *Birth Control and Condom Use* (proportion of sex protected with birth control/condoms), *Paid Sex* (paid individual for sex), *Partner Risk* (sex partner used drugs).

**Results:** A total of 10,828 respondents were identified at Wave 1, 2, and 3 (5,728 females and 5,100 males). The mean delinquency was low for males ( $W1 = 1.01$ ,  $W2 = 0.84$ ,  $W3 = 0.68$ ) and females

( $W1 = 0.61$ ,  $W2 = 0.52$ ,  $W3 = 0.22$ ). A total of 6.94% of the females and 5.22% of the males had any of the three infections. Given the gender differences in delinquency rates, we conducted the multivariate regression analyses separately for males and females controlling for demographic characteristics. We found the sum of delinquency scores was not significantly associated with sexually transmitted infections for females or males. This was not the case for the sexual behavior measures which were all significantly predicted by increased delinquency. Males and females with higher delinquent score were more likely to pay for sex (females OR = 2.15; 95% CI = 1.64, 2.82;  $p < 0.001$ ; males OR = 1.30; 95% CI = 1.12, 1.50;  $p < 0.001$ ); and more likely to have sex with someone taking drugs (females OR = 2.05; 95% CI = 1.68, 2.50;  $p < 0.001$ ; males OR = 1.49; 95% CI = 1.23, 1.80;  $p < 0.001$ ). Higher delinquent scores also predicted more life-time sexual partners (female OR = 1.28; 95% CI = 1.20, 1.36;  $p < 0.001$ ; males OR = 1.15; 95% CI = 1.11, 1.20;  $p < 0.001$ ). Among males, greater delinquency was significantly associated with lower proportion of birth control use months (OR = 0.92; 95% CI = 0.86, 0.99;  $p < 0.032$ ) and lower condom use (OR = 0.95; 95% CI = 0.84, 1.00;  $p < 0.042$ ). We conducted a separate analysis of only Wave 3 delinquency and found similar results (associated with sexual behavior and not with STD).

**Conclusions:** The results indicate that young adult sexual scripts are influence by childhood delinquency. Even though the rates of delinquency were low, any delinquency was a robust predictor of sexual behavior. The results highlight the difficulty in predicting STD infection and that other important aspects of development may be better predictors than individual behavior.

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## 6.

### THE UNINTENDED CONSEQUENCES OF INTENDED PREGNANCIES: ADOLESCENTS, CONDOM USE, AND HIV TRANSMISSION IN MOZAMBIQUE

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**Purpose:** Unwanted pregnancies can cause social and economic problems for sub-Saharan African youth, but the consequences of *intended* adolescent pregnancy have gone unremarked. Rarely do studies recognize that youth who want to get pregnant are less likely to practice safe sex, and are therefore at greater risk of contracting sexually transmitted infections (STIs) such as HIV. Youth HIV prevention programs focus on disease risk and only a small number acknowledge that abstinence and condom use can also prevent pregnancy. In sub-Saharan Africa, a woman's first birth demonstrates her fecundability and may increase her marriage potential. An early or adolescent pregnancy may therefore be desirable and intended, but a positive attitude toward fertility may be placing some youth at higher risk for STIs.

**Methods:** Data come from the 2003 Mozambique Demographic and Health Survey (MDHS). The role of youth fertility desires on condom use with non-marital partners is examined, controlling for other factors. Bivariate and multivariate analyses of condom use are presented.

**Results:** In the MDHS, 28% of all female youth and 37% of sexually active youth had any non-marital sexual partners. In multivariate analyses, controlling for other factors associated with

condom use, female youth who want to get pregnant soon are significantly less likely (OR: 0.35; 95% CI: 0.22-0.55) to use condoms with non-marital partners than youth who want to delay childbearing. Female youth who do not want any or more children were also significantly less likely to use condoms (OR: 0.34; 95% CI: 0.18-0.63) than youth who want to delay childbearing.

**Conclusions:** Adolescents' fertility desires are an important moderator of condom use and impact both rates of unintended pregnancy and HIV transmission. Youth who do not want chil-

dren and are not using condoms may be ambivalent about future childbearing. Programs that promote condom use for disease prevention purposes ignore the common reality that in sub-Saharan Africa pregnancy can be desirable as a precursor to union formation. Programs for sexually active youth (married or unmarried) need to recognize the importance of fertility desires as a potential moderator of condom use, whether or not the woman is at risk of HIV/STI.

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