Selecting sex partners outside of social network decreases risk for repeat infections

Men with repeat STIs may be a major factor for maintaining endemic rates of gonorrhea and chlamydia. Several factors such as number of sex partners, inconsistent and incorrect condom use, and new partners affect incident STIs. Re-exposure to an untreated partner is one reason for repeat infection. Also, high prevalence of STIs in a person’s social network may be associated with high incidence and repeat infection.

This study examined the risk for repeat STIs associated with reducing the number of sex partners who come from within the social networks of young males in two cities.

**Methodology**

Study participants were 47 men from Baltimore and 92 men from Denver who had complete social network and STI information. Asymptomatic males diagnosed with chlamydia and/or gonorrhea were recruited and interviewed.

The interviewers assessed sexual behaviors, risk reduction behaviors with main and casual partners, STI history, and perceptions of social characteristics and sexual behaviors of sex partners. Researchers characterized the sex partners of each participant as belonging to or not belonging to a social network. Each participant had one follow-up visit at which both screening and interview were repeated.

**Outcomes of the Study**

Mean age 18.5 years and 20.6 years for the Baltimore and Denver men, respectively. All Baltimore men were black whereas the race/ethnicity of the Denver men varied. At 6.4% (3 or 47) of the Baltimore follow-up visits, participants were diagnosed with a repeat STI and at 6.5% of the Denver follow-up visits, participants were diagnosed with a repeat STI. Major findings include:

- A decrease in the percentage of partners belonging to a participant’s social network was protective for repeat STI. In both cities, there were less repeat STIs among participants with a reduced percentage of sex partners coming from their social network.
- Participants with new sex partners over the follow-up interval appeared to be more likely to be diagnosed with repeat STI compared to those without a new sex partner, although the findings were not significant.
- At follow-up visits, 78% of Denver participants had one sex partner, 14% had two sex partners, 2% had 3 sex partners, and 6% had no sex partners.
- At follow-up visits, 83% of Baltimore participants had one sex partner, 8% had 2 sex partners, 5% had three sex partners, and 4% had 4 partners.

**Implications for Prevention**

A common way people often select new sex partners is from their social network. If a person acquires an STI, then the social network could be considered a high-prevalence group. Hence, a person may be at less risk by finding a new sex partner from outside his or her social network.

This study found that selecting new sex partners from outside social networks was associated with reduced risk for repeat STI. The findings suggest that interventions are needed that reduce the STI prevalence in the social networks of infected men.

**SOURCE:**

Studies show condom use related to reduced risk in men

Epidemiological studies indicate that male condoms are highly effective against HIV transmission. Results of studies for other STIs has been weaker and less consistent. Studies published 1966-2004 were assessed to determine risk reduction for gonorrhea and/or chlamydia associated with male condom use.

Of 45 studies identified, most found reduced risk of infection associated with condom use. All studies had methodological limitations, such as not distinguishing between consistent and inconsistent use, which often underestimated condom effectiveness. The magnitude of risk reduction varied widely and was lower than expected given the physical barrier properties of condoms and route of transmission for these infections.

Despite the methodological limitations, condom use was associated with reduced risk of gonorrhea and chlamydia in men and women in most studies.


Ecological factors related to STD risk in detained females

Adolescents comprise 10% of the U.S. population, yet they represent more than 60% of all STDs. Detained female youths report higher STD incidence compared to other adolescent groups.

This study used Bronfenbrenner’s conceptual framework of an ecological systems model to examine factors associated with STD risk behaviors among 280 sexually active detained adolescent females.

Sexually active female adolescents who had stronger risk-taking attitudes, used substances, reported less parental monitoring, had lower levels of familial support, supported gender norms favoring male dominance, had risky peer norms, or perceived less student-teacher connectedness were more likely to report higher levels of STD risk behaviors. Factors proximal to adolescents (e.g. peer, family, teachers) and larger societal influences (e.g. gender norms supporting male dominance) were directly related to STD risk behaviors.

A multisystemic approach for STD prevention is needed for this high-risk population.


Having HIV+ sex partner related to seroconversion

A study of 1013 initially HIV-negative injecting drug users, 5% who had a HIV-positive sex partner found elevated HIV incidence rates among IDUs. By 18 months after baseline, IDUs with HIV+ sex partner had a rate of HIV infection more than 2 times higher than IDUs without HIV+ sex partner. Results highlight the importance of assessing partner traits of IDUs.


HIV diagnoses decreased for blacks

Data from 33 state and local health departments with name-based HIV reporting found that the rate of HIV diagnosis among non-Hispanic blacks decreased from 2001-2004, but HIV rates among blacks remained disproportionally high. Blacks had a HIV rate 8.4 times higher than whites.