

'sexting' as key term. We extracted data on; reasons for sexting, attitudes, and factors statistically associated with sexting.

Results Seven studies were included; most were cross-sectional, all were quantitative and conducted in the United States. Six studies assessed correlates of sexting in teenagers/young adults and found the following statistical associations; older adolescent, dating, sexually active, sexual risk behaviours, substance use, lower parental educational, peers sexting, and greater texting frequency. Girls were more likely to be senders, boys more likely to be receivers and to have asked someone to sext. Sexually active respondents were more likely to be both senders and receivers. Two studies explored attitudes about sexting finding those who sent pictures were more likely to consider sexting acceptable, over one third of non-sexters reported positive attitudes towards sexting, and most of those who sent pictures were bothered by having been asked to sext. Expecting serious legal consequences for getting caught sexting did not reduce reported sexting.

Conclusion Many young people don't perceive sexting negatively. Sexting may either be part of a cluster of risky sexual behaviours or in fact lead to sexual risk behaviour. Because of the cross-sectional nature of the studies, we were unable to determine causality. Additional research is needed to understand contexts in which sexting occurs, and motivations. Longitudinal designs are required to explore causality with sexual risk behaviour.

P4.079 SEXUAL BEHAVIORS AND SAFETY STRATEGIES OF WOMEN WHO HAVE SEX WITH MEN AND WOMEN

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Background Women who have sex with women and men (WSWM) are at an increased risk for STI. Yet, knowledge regarding the behaviours associated with infection remains limited, with most studies focused on the experiences of women who have sex with only men or women. The diversity of sexual behaviours WSWM engage in may be limited by comparing WSWM to other groups. Instead, focusing on their experiences exclusively may provide a more comprehensive understanding of the sexual lives of WSWM.

Methods Local (Indianapolis, IN, US) women who had engaged in recent genital contact with a male and female partner were invited to complete an on-line survey followed by an interview. Participants were asked to indicate the most recent time they had participated in a variety of behaviours with a male and/or female partner.

Results Eighty participants ranging in age from 18 to 51 ($M=26.74$, $SD=7.97$) completed the survey. The most commonly reported sexual behaviours were similar for male and female partners, including kissing, cuddling, external genital rubbing, vaginal fingering, cunnilingus/fellatio and penile-vaginal intercourse. While less commonly reported, a sizable minority of participants reported vaginal fisting, anal fingering and anilingus. Toy use was reported by the majority of the participants with vibrator use reported as the most commonly used toy. Approximately 75% of participants indicated sexual behaviour with more than one person at one time. The percentage of participants who reported barrier use varied by behaviour and partner gender with the lowest percentage of participants reporting use during oral sex or genital-on-genital rubbing with a female partner (> 90% never) and the highest percentage reporting use during penile-vaginal intercourse (> 25% always).

Conclusion Participants reported engaging in a variety of sexual behaviours that may facilitate STI transmission. Further knowledge about the types of behaviours WSWM engage in may help inform risk reduction strategies.

P4.080 UNDERSTANDING THE INFLUENCE OF INDIVIDUAL AND PARTNER-SPECIFIC SEXUAL HEALTH ON SEXUAL RISK BEHAVIOUR AMONG ADOLESCENT WOMEN

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Background Sexual health identifies both individual and partner-specific factors as important elements in public health approaches to STI prevention among adolescents, yet little empirical evidence links them to specific STI-related health outcomes.

Method Data were individual and partner-specific quarterly interviews from a cohort of young women in Indianapolis ($N=387$, 14–17 yrs.). Using an existing sexual health definition (WHO, 2002) we created two standardised, multi-item sexual health scales: *individual sexual health* (sexual positivity, absence of genital pain, family communication, family connexion) and *partner-specific sexual health* (relationship satisfaction, sexual satisfaction, condom use self-efficacy, pregnancy prevention attitudes, sexual communication, partner's connexion to family) (both $\alpha \geq 0.85$). Outcomes were: *used a condom at last sex* (no/yes), *ratio of condom-protected coital events*, *any sexual coercion* (no/yes), *current number sex partners* (2+/1), *future number of sex partners* (next 90-days: 2+/1). Analyses were multi-level logistic and linear regression (HLM, 7.0; all $p < 0.05$), overall and by current number of sexual partners.

Results Individual (OR = 1.22) and partner-specific (OR = 1.87) sexual health predicted condom use at last sex; partner-specific sexual health predicted no sexual coercion (OR = 0.69), a higher ratio of condom-protected coital events ($b = 0.12$), as well as having one sexual partner currently and for the anticipated future. Higher partner-specific sexual health predicted condom use at last sex in currently single (OR = 1.70) and in currently multiple partner relationships (OR = 2.22), a higher ratio of condom protected coital events in currently single ($b = 0.15$) and in currently multiple partner relationships ($b = 3.66$), and absence of sexual coercion (OR = 0.19) in currently multiple-partner relationships.

Conclusion Individual and partner-specific sexual health are separately linked to key STI-related public health indicators. These data suggest that different elements may require emphasis to more fully support effective sexual health approaches to reducing STI in adolescents.

P4.081 STD RISK PERCEPTION AMONG HIGHER RISK UNIVERSITY STUDENTS IN HALIFAX, CANADA

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Background Perceived risk is central to health behaviour theory, though little is known about what creates perceived risk of contracting STDs. We examined self-rated risk of STD in higher sexual risk (HSR) university students in Halifax, Canada, to determine factors associated with recognition of such risk status.

Methods Using an online survey, we asked university students about their perception of their STD risk (greatly/quite a lot at risk versus not very much/no risk), their sexual behaviours, chlamydia knowledge (CK), friends' more liberal attitudes to sexual risk-taking (FLASRT), depression, and personal factors. HSR was defined as having had both ≥ 2 partners for vaginal sex in the past year and no condom use at last intercourse. Variables initially associated with perceived HSR ($p < 0.10$) were entered into a logistic regression model controlling for gender to determine which remained associated with perception of being at HSR.

Results The survey response rate was 32% ($N=4490$), and 526 were at HSR. Of those with 2–5 partners in the previous year, only 14% rated themselves as at HSR, while 43% of those with ≥ 6

partners did so. In multivariate analysis, compared with those with 2 partners, those with 3 partners and those with 4 were not significantly more likely to perceive themselves at HSR. At 5 partners the Odds Ratio (OR) was 5.30 (95% CI 2.30–12.22) and at ≥ 6 partners it was 9.18; (95% CI 4.42–19.09). FLASRT was also associated with perceived higher risk (OR 1.07; 95% CI 1.02–1.13). CK was not associated with risk perception.

Conclusion Higher risk university students often do not recognise their STD risk status, and more often perceive risk only after a high threshold of multiple partners is reached. Prevention messages should emphasise that STD risk exists at lower levels of multiple partners than students perceive.

P4.082 UNDERSTANDING THE LINK BETWEEN ALCOHOL USE AND STIS: TWO TESTS OF MEDIATION

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Background Alcohol use has been associated with STIs. This association is generally attributed to an impaired ability to appreciate future consequences, leading individuals to engage in unprotected sex after consuming alcohol. However, a second pathway through which alcohol use leads to STI is through an impaired ability to use a condom correctly. Problems related to using condoms reduce their efficacy and have been associated with incident STIs. This study investigates both unprotected sex and incorrect condom use as potential mediating pathways through which alcohol use might lead to STIs.

Methods Participants (498 patients; 41% female; 69% African American) attending a publicly-funded STI clinic completed a computerised survey assessing global alcohol use (AUDIT-C), alcohol use before sex, incorrect condom use, episodes of unprotected sex, and recent STI history. Bootstrapped mediation analysis with 5000 resamples tested a multiple mediator model in which the number of episodes of unprotected sex and incorrect condom use mediated the relation between alcohol use and STI.

Results Participants reported an average of 17 episodes of unprotected sex in the past 3 months; 17% reported being diagnosed with an STI in the past 3 months. Controlling for gender, inconsistent condom use mediated the relation between alcohol use before sex and STI (95% bootstrapped CI for the indirect effect = 0.002 to 0.056; $p < 0.05$). The number of episodes of unprotected sex did not mediate this relation. No significant associations were found when global alcohol use was used as the predictor.

Conclusion Alcohol use before sex may increase risk for STIs due to an impaired ability to use condoms correctly, rather than through unprotected sex. Findings have implications for STI prevention because intoxication may impair effective use of condoms despite intentions to use them.

P4.083 PREVALENCE AND CORRELATES OF SEXUAL PARTNER CONCURRENCY AMONG PATIENTS ATTENDING A PUBLICLY-FUNDED STI CLINIC IN THE UNITED STATES

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Background Partner concurrency, or overlapping sexual partnerships, is associated with the transmission of HIV and other STIs. In the United States, some urban populations report high rates of

partner concurrency but relatively few U. S. studies have investigated correlates of partner concurrency empirically. The purpose of the present study was to investigate the prevalence and correlates of partner concurrency among urban patients attending a publicly-funded STI clinic.

Methods Participants were 502 patients attending an STI clinic (41% female; 69% African American). They completed a computerised survey assessing demographic characteristics, partner concurrency, substance use, concurrency norms, environmental factors affecting concurrency (i.e., shortage of men), attitudes towards concurrency, and self-efficacy for having one partner.

Results Nearly one-half of the sample (46%) reported concurrent sexual partnerships in the past 3 months. In univariate analyses, being male, drinking more, using marijuana more frequently, perceiving multiple partners as normative, perceiving that the shortage of men influenced sexual partnerships, more positive concurrency attitudes, and less self-efficacy for having one partner were associated with concurrency (all $p < 0.05$). Other demographic characteristics (race, income, education, age) were not associated with concurrency. In multivariate analyses, greater marijuana use (OR = 1.17) and having more positive concurrency attitudes (OR = 1.95) were independently associated with partner concurrency ($p < 0.05$).

Conclusion The prevalence of concurrency was high in this population of patients attending an STI clinic. Interventions to reduce concurrency should target marijuana use and attitudes towards concurrency.

P4.084 SIGNIFICANT BEHAVIOUR CHANGE IN PEOPLE WHO INJECT DRUGS (PWID) AND FEMALE SEX WORKERS (FSWS) IN BANGLADESH

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Background The HIV prevalence in Bangladesh is still low with $< 0.1\%$ in general population and $< 1\%$ in most at risk populations (MARPs) though all the risk factors prevail like unsafe injecting practises and sex work, low condom use, taboos, social denial, illiteracy and a lack of awareness. With grants from the Global Fund, Save the Children has doubled the national coverage for people who inject drugs (PWID) and female sex workers (FSWs). Nearly 13,500 PWID and 29,000 FSWS are under the programme coverage.

Methods Save the Children provides essential services for PWID through 69 drop in centres (DICs) and for FSWS through 100 DICs and 10 outreach offices in 53 districts. The DICs provides them with sterile needle-syringe, access to detoxification, abscess management, condoms, STI services, general health services, referrals and information including bathing, resting and recreational facilities. Over 23 million needle/syringe and 3.5 million condoms for PWID and 55 million condoms for FSWS are distributed. The programme also provides information and services through a multi-level multi-channel approach to the general and vulnerable youth.

Results The percentage of PWID using sterile injecting equipment increased from 39% (Baseline Survey, 2008) to 92% in 2012 (Mid Term Survey, 2012). PWID using condom during the most recent sexual contact with a FSWS within last 12 months increased from 39% to 75.4%. FSWS using condom during the most recent sexual contact increased from 63% to 95.5%. Young people aged 15–24 (potential clients of FSWS and vulnerable to drugs), who correctly identified at least two ways of preventing HIV, increased from 40.8% (Baseline Survey, 2005) to 81.7%.

Conclusion The programme contributed a lot to bring positive behaviour changes in PWID and FSWS. Further expansion and scale up will enable them for safer practises that will help the country retaining the low HIV prevalence.