

home-collection kit included a self-collected vaginal swab (women), UriSWAB (Copan) for urine collection (heterosexual men), and UriSWAB plus rectal swab (MSM). The primary outcome was the proportion retested at 1–4 months after chlamydia diagnosis, and the secondary outcome was the proportion with repeat positive results at the 1–4 month retest. Any testing outside the study sites was collected and included in the outcomes. An intention to treat analysis was conducted.

Results Overall 61% (183/300) of home group participants retested within 1–4 months of chlamydia diagnosis compared with 39% (118/300) in the clinic group ($p < 0.001$). According to risk group, the differences were: 62% vs 45% (MSM); 65% vs 38% (women); and 55% vs 34% (heterosexual men); all $p < 0.05$. Overall the proportion with a repeat positive result at the 1–4 month re-test was 16% (95% CI: 11–23) (30/183) in the home group compared with 10% (95% CI: 5–17) (12/118) in the clinic group: 26% (95% CI: 16–39) vs 11% (95% CI: 4–24) MSM; 12% (95% CI: 5–22) vs 5% (95% CI: 1–18) women; and 11% (95% CI: 4–22) vs 15% (95% CI: 5–31) heterosexual men.

Conclusion SMS reminders combined with home-based collection was a very effective strategy to increase chlamydia retesting in all three risk groups, and also detected additional repeat infections in MSM. The acceptability to patients and health care provider costs are currently being evaluated.

0.23 - Risk behaviours and preventive interventions

023.1 SEXUAL RISK TRAJECTORIES AMONG MSM IN THE UNITED STATES: IMPLICATIONS FOR PREP DELIVERY

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Background CDC guidelines state that men who have sex with men (MSM) at ongoing high risk of HIV infection should be targeted for pre-exposure prophylaxis (PrEP). Longitudinal data can inform the implementation of these guidelines.

Methods HIV-seronegative MSM enrolled in the Multicenter AIDS Cohort Study at 4 U.S. sites completed ACASIs at semi-annual visits. Behaviors since the last visit from 10/1/2003–9/30/2011 were used to assign participants sexual risk behaviour (SRB) scores ranking their risk level at each visit: (0) no insertive and/or receptive anal intercourse (IAI/RAI), (1) no unprotected IAI and/or RAI (UIAI/UIAI), (2) only UIAI, (3) URAI with 1 HIV-negative partner, (4) condom-seropositioning, (5) condom-serosorting, and (6) no seroadaptive behaviours. Group-based trajectory modelling was used to examine SRB scores (< 4 vs. ≥ 4) and identify groups with distinct patterns of sexual risk.

Results The sample ($N = 430$) was 38.4% White, 42.3% Black, 14.9% Hispanic and had a median age of 39.1 years (IQR = 31.3–44.3). Three trajectory groups were identified: no risk ($N = 286$; 66.5%), low risk ($N = 89$; 20.7%), and high risk ($N = 55$; 12.8%). Compared to the no risk group, high risk group membership was negatively associated with older age (adjusted odds ratio [AOR] for 5-year age difference = 0.68, 95% CI: 0.56–0.84) and positively associated with being White (AOR = 2.12, 95% CI: 0.97–4.62), earning

an income $\geq \$20,000$ (AOR = 4.96, 95% CI: 2.10–11.71), depression (CESD ≥ 16) (AOR = 2.06, 95% CI: 0.98–4.31), and stimulant use (AOR = 2.37, 95% CI: 1.18–4.78) at the index visit. Adjusted group membership probabilities for a 30 year-old, White male reporting an income $\geq \$20,000$, depression, and stimulant use at the index visit were 0.15 (no risk), 0.39 (low risk), and 0.46 (high risk).

Conclusion Findings suggest MSM following high risk trajectories could be identified by the socio-demographic and behavioural factors described above, thus enabling PrEP programmes to target those at ongoing high risk of HIV infection.

023.2 CORRELATES OF INCONSISTENT CONDOM USE DURING ANAL SEX WITH FEMALE SEX WORKERS (FSWS) AMONG MALE CLIENTS: SURVEY FINDINGS FROM THREE HIGH PREVALENCE STATES OF INDIA

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Background Recent studies from India show that self-reported anal sex increased from 3% to 22% among female sex workers. However, comparable data from male clients' of FSWs are lacking. Using data from a bio-behavioural survey (2009–2010), we examined correlates of male clients' self-reported inconsistent condom use during anal sex with FSWs in Andhra Pradesh, Maharashtra and Tamil Nadu.

Methods Using a two-stage time-location cluster sampling, we recruited 4,803 men aged between 18 and 60 years who purchased sex from FSWs in the past month. After obtaining informed consent, respondents were interviewed and tested for HIV and STIs (Syphilis, Gonorrhoea and Chlamydia). Logistic regression analysis was used to identify factors associated with inconsistent condom use during anal sex (in the past six months) with FSWs controlling for socio demographics and other contextual characteristics.

Results Overall, 12.4% clients reported anal sex in the past 6 months and nearly half (48.4%) used condoms inconsistently. Majority of these inconsistent users solicited FSWs from public places (77%), consumed alcohol (50%), had unprotected vaginal sex (99%) and also reported anal sex with other men (19%). Factors associated with increased odds for inconsistent condom use were being aged above 25 years (AOR:3.38, $p = 0.012$), occupation as manual labourer (AOR:2.05, $p = 0.029$) and perceiving to be at risk of HIV (AOR:10.2, $p = 0.000$). Those literate (AOR:0.40, $p = 0.033$) and currently married (AOR:0.41, $p = 0.056$) were at decreased odds and being STI/HIV positive was not significantly associated with inconsistent condom use.

Conclusion Results suggest that a relatively high proportion of clients were not using condoms consistently during anal and vaginal sex with FSWs which implies a greater risk of acquiring HIV and its further transmission to their male and female sexual partners (including spouses). Given the multidirectional risk, safer sex messages addressing heterosexual anal sex needs to be incorporated into HIV prevention interventions.

023.3 PREDICTORS OF SELF-ASSESSED RISK OF CHLAMYDIA TRACHOMATIS INFECTION AMONG ADOLESCENTS IN NORWAY

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