

a larger group of individuals who attend these venues may be addressed.

**Disclosure** No significant relationships.

P709

# ABNORMAL CERVICAL SCREENING TEST AND SEXUALLY TRANSMITTED INFECTIONS IN WEST AFRICA'S FEMALE SEX WORKERS

<sup>1</sup>Ibrahima Tégoué\*, <sup>2</sup>Fatoumata Korika Tounkara, <sup>3</sup>Fernand Guédou, <sup>4</sup>Bintou Dembele, <sup>5</sup>Michel Alary. <sup>1</sup>Gabriel Toure Teaching Hospital, Bamako, Mali; <sup>2</sup>Axe Santé des Populations et Pratiques Optimales en Santé, HSS, Social and Preventive Medicine, Québec, Canada; <sup>3</sup>Dispensaire IST, Cotonou, Benin; <sup>4</sup>ARCAD/SIDA, Bamako, Mali; <sup>5</sup>CHU de Québec – Université Laval, Québec, Canada

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**Background** Cervical cancer is the most common cancer in women in Sub-Saharan Africa. The situation is worst among female sex workers (FSW), a population with poor access to quality reproductive health services. This study aimed to: (1) estimate the prevalence of abnormal cervical screening test (ACST) and (2) assess the association between ACST and sexually transmitted infections (STIs)/lower genital tract infections (LGTIs) among FSW in Cotonou (Benin) and Bamako (Mali).

**Methods** We conducted a cross-sectional study among non-pregnant FSW aged 18 to 64 years from April 2017 to February 2018. We used a peer recruitment sampling strategy in two West African cities. Visual inspection with acetic acid (5%) and with Lugol's iodine (VIA/VIL) were performed to screen for cervical cancer. Women were also screened for STIs/LGTIs, specifically those with *Trichomonas vaginalis* (TV), *Candida albicans* (CA), *Chlamydia trachomatis* (CT), *Neisseria gonorrhoeae* (NG) and bacterial vaginosis (BV). ACST prevalence was computed and its association with STIs/LGTIs was assessed using multivariate logistic regression.

**Results** ACST prevalence was 20.2% among 312 FSW in Benin Vs. 10.5% among 353 FSW in Mali. Of these, 91.2% never had cervical screening. Mean age at sexual debut was  $16.3 \pm 3.0$  years. The overall STIs/LGTIs prevalence rates were: TV, 2.7%; CT, 10.9%; NG, 19.4%; HIV, 23.0%; CA, 7.4% and BV, 37.1%. CA was the only infection associated with ACST (aOR = 4.03; 95%CI: 1.77–9.17). Also, there was a statistical association between a coinfection by CA-TV and ACST (aOR = 3.21; 95%CI: 1.47–7.01). Finally, age at sexual debut < 10 years old was significantly associated with ACST (aOR = 6.10; 95%CI: 1.19–31.21).

**Conclusion** The prevalence of ACST and STIs/LGTIs was very high; there is an obvious need to improve the diagnostic capability and the clinical management of these conditions among FSW of Sub-Saharan Africa.

**Disclosure** No significant relationships.

P710

# EPIDEMIOLOGY OF ABNORMAL CERVICAL CYTOLOGY IN FEMALE SEX WORKERS IN MALI, WEST AFRICA

<sup>1</sup>Fatoumata Korika Tounkara\*, <sup>2</sup>Ibrahima Tégoué, <sup>3</sup>Fernand Guédou, <sup>4</sup>Bintou Dembele, <sup>5</sup>Michel Alary. <sup>1</sup>Axe Santé des Populations et Pratiques Optimales en Santé, HSS, Social and Preventive Medicine, Québec, Canada; <sup>2</sup>Gabriel Toure Teaching Hospital, Bamako, Mali; <sup>3</sup>Dispensaire IST, Cotonou, Benin; <sup>4</sup>ARCAD/SIDA, Bamako, Mali; <sup>5</sup>CHU de Québec – Université Laval, Québec, Canada

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**Background** To our knowledge, no previous study has been carried out about cervical cancer in female sex workers (FSW) in Mali. The objective of this work was to estimate the prevalence and risk factors of cervical precancerous lesions among FSW in Mali.

**Methods** We carried out a cross-sectional study from November 2017 to February 2018 in Mali. Screening for cervical cancer was performed with Papanicolaou test. HIV and syphilis serology, direct examination of vaginal smears for vaginitis and bacterial vaginosis and nucleic acid amplification tests for gonorrhea and chlamydia were also carried out. We calculated the prevalence rates. Risk factors of low grade squamous intraepithelial lesions (LSIL), and high grade squamous intraepithelial lesion (HSIL) were identified using polytomous logistic regression. Adjusted odd ratios (aOR) with 95% confidence intervals (95%CI) were estimated.

**Results** Among the 353 women enrolled in the study, 20.4% were HIV seropositive, whereas 53.8% had at least one of other sexually transmitted infections (STIs), including trichomoniasis at 3.7%; chlamydia, 14.0%; gonorrhea, 24.4%, syphilis, 3.1% and bacterial vaginosis (Nugent score  $\geq 7$ ), 23.5%. The mean age at first sexual intercourse was  $15.3 \pm 2.9$  years. Fifty-eight women had abnormal cytology/histology (17.4%; 95% CI: 13.3–21.4%) and only 8.8% of FSW had at least one cervical screening test in the past year. Among all participants, 2.7% presented atypical glandular cells of undetermined significance (AGUS), 11.3% with LSIL, and 3.3% with HSIL. Risk factors of LSIL were HIV infection (aOR = 1.53; 95%CI: 1.02–2.30) and age at sexual debut < 10 years (aOR = 4.52; 95%CI: 1.11–18.45). Factors associated with HSIL were self-reported previous STIs (aOR = 4.92; 95%CI: 1.15–21.09) and current syphilis (aOR = 8.12; 95%CI: 1.86–35.39).

**Conclusion** Low and high grades cervical squamous intraepithelial lesions have different risk factors profile in Malian FSWs.

**Disclosure** No significant relationships.

P712

# "YOU NEED A CASH BUFFER": MALE SEX WORK AND CONDOM USE IN THE ERA OF HIV PRE-EXPOSURE PROPHYLAXIS

<sup>1</sup>Denton Callander\*, <sup>2</sup>Stephen Bell, <sup>3</sup>Victor Minichiello, <sup>2</sup>Ryan Deveau, <sup>2</sup>Garrett Prestage, <sup>4</sup>Basil Donovan. <sup>1</sup>New York University, School of Medicine, New York, USA; <sup>2</sup>UNSW Sydney, The Kirby Institute, Sydney, Australia; <sup>3</sup>La Trobe University, Melbourne, Australia; <sup>4</sup>UNSW Sydney, Kirby Institute, Sydney, Australia

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**Background** HIV pre-exposure prophylaxis (PrEP) has reshaped condom use practices in many contexts, but little is known about its impact on commercial sex encounters between men. This study investigated condom use in Australian male sex work.

**Methods** During 2017–2018, we undertook a mixed-method ethnographic study of male sex work in Australia, working with male sex workers (n=32) and clients of sex work (n=3) to collect online sex work profile data and conduct individual and group interviews. These data were analyzed topically with a focus on condom use.

**Results** In November 2018, online data were scraped from 236 male sex work profiles: 2.1% expressed an explicit requirement for condom use, down from 14.2% in June 2017

( $p < 0.001$ ). In the interim, PrEP was widely implemented across Australia. Using interview data, we generated two themes describing condom use. Some sex workers and all of the clients we interviewed strictly refused to engage in condomless commercial sex. This strictness, however, extended only to anal sex (several participants laughed at using condoms for oral sex) and commercial encounters (many men were willing to forgo condoms for personal sex). Most male sex workers, however, were highly pragmatic about condoms. They described assessing the commercial risks-benefits of condoms, and while men were aware that condomless sex put them at risk for STIs other than HIV, they balanced that risk against increased earning potential: sex workers consistently reported charging more for condomless sex. This approach was characterized as a 'cash buffer' to compensate for the risk of being unable to work following a STI diagnosis.

**Conclusion** Although condom use has shifted dramatically among male sex work communities in Australia, to some they remain an important safer sex strategy. HIV PrEP and market forces have increased STI risk among male sex workers, making them ideal candidates for STI antibiotic prophylaxis.

**Disclosure** No significant relationships.

#### P713 HIGH PREVALENCE OF CONDOMLESS ANAL INTERCOURSE AMONG FEMALE SEX WORKERS IN IRAN

<sup>1</sup>Mohammad Karamouzian\*, <sup>2</sup>Azam Rahmani, <sup>3</sup>Mostafa Shokoochi, <sup>3</sup>Hamid Sharifi, <sup>4</sup>Ali Mirzazadeh. <sup>1</sup>BC Center on Substance Use, Vancouver, Canada; <sup>2</sup>Tehran University of Medical Sciences, Tehran, Iran; <sup>3</sup>WHO Collaborating Center for HIV/STI Surveillance, Kerman, Iran; <sup>4</sup>UCSF, San Francisco, USA

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**Background** Condomless sex and particularly anal intercourse (AI) with partners and clients are among the primary drivers of the HIV epidemic among female sex workers (FSW) in Iran. However, little is known about AI prevalence and its correlates among FSW in Iran.

**Methods** Data were obtained from a bio-behavioral surveillance survey of 1347 FSW conducted across 13 major cities in Iran in 2015. FSW were eligible if they (i) were  $\geq 18$  years of age, (ii) reported penetrative sex with more than one client in the previous year. Data were collected through one-on-one interviews using a standardized risk assessment questionnaire. A modified Poisson regression model was used to examine the correlates of recent (i.e., past-month) HAS and adjusted prevalence ratio (APR) and 95% confidence intervals (CI) were reported (analytic sample: 1337).

**Results** Recent AI was reported by 18.5% (95% CI: 13.0, 25.6) of the participants; of whom, 196 (80%) reported inconsistent condom use during their AIs in the previous month. Recent AI was positively associated with younger ( $\leq 18$ ) age (APR: 1.24; 95% CI: 1.06–1.59), history of group sex in the previous month (APR: 1.62; 95% CI: 1.08–2.44), higher number of clients in the previous month (APR: 2.35; 95% CI: 1.38–4.00), and weekly use of alcohol (APR: 1.62; 95% CI: 1.12–2.34). Conversely, recent AI was negatively associated with being married (APR: 0.52; 95% CI: 0.34–0.80) and having had protected sex with their last client (APR: 0.73; 95% CI: 0.54–0.97).

**Conclusion** About one in five FSW reported engaging in recent AI; most of which were condomless. AI was more frequent among younger FSW and those with higher number of clients and problematic Alcohol use. Harm reduction and condom promotion efforts in Iran should include effective packages to address high prevalence of unsafe AI and re-emphasize the importance of condom use for both FSW and their partners/clients.

**Disclosure** No significant relationships.

#### P714 HIV TESTING AND UNDIAGNOSED FRACTION AMONG ADOLESCENT GIRLS AND YOUNG WOMEN BY ENGAGEMENT IN SEX WORK IN MOMBASA, KENYA

<sup>1</sup>Huiling Ma, <sup>2</sup>Parinita Bhattacharjee, <sup>3</sup>Linwei Wang, <sup>4</sup>Vernon Mochache, <sup>5</sup>Helgar Musyoki, <sup>6</sup>Peter Gichangi, <sup>7</sup>James Blanchard, <sup>8</sup>Paul Sandstrom, <sup>8</sup>Christina Daniuk, <sup>7</sup>Stephen Moses, <sup>7</sup>Marissa Becker\*, <sup>9</sup>Sharmistha Mishra. <sup>1</sup>St. Michael's Hospital, Centre for Urban Health Solutions, Toronto, Canada; <sup>2</sup>University of Manitoba, Centre for Global Public Health, Nairobi, Kenya; <sup>3</sup>St. Michael's Hospital, Toronto, Canada; <sup>4</sup>University of Maryland, Centre for International Health, Education and Biosecurity, Berwyn, USA; <sup>5</sup>National AIDS and STI Control Programme, Nairobi, Kenya; <sup>6</sup>University of Nairobi, Nairobi, Kenya; <sup>7</sup>University of Manitoba, Centre for Global Public Health, Department of Community Health Sciences, Winnipeg, Canada; <sup>8</sup>Public Health Agency of Canada, Winnipeg, Canada; <sup>9</sup>St. Michael's Hospital, Li Ka Shing Knowledge Institute, Toronto, Canada

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**Background** Traditional HIV prevention and testing services are generally designed to either reach female sex workers or to reach adolescent girls and young women (AGYW), but not both. We sought to compare the levels and determinants of HIV testing, and the prevalence of undiagnosed HIV across subsets of AGYW in Kenya.

**Methods** We used data from *Transitions*, a 2015 cross-sectional survey of 1,299 women age 14–24 years who frequented hot-spots associated with formal sex work in Mombasa, Kenya. We compared the prevalence and frequency of recent HIV testing in the previous year between AGYW involved in sex work (YSW, N=408) versus those who did not sell sex (NSW, N=891), and excluding those diagnosed with HIV  $\geq 1$  year before the survey. We used logistic regression model to identify univariate determinants of recent testing in each group. We then compared the prevalence of undiagnosed HIV among YSW and NSW living with HIV.

**Results** Overall, 72% reported a recent HIV test: 85% YSW and 65% NSW ( $p < 0.01$ ), of whom, 42% of YSW and 27% of NSW tested at least twice in the previous year ( $p < 0.01$ ). Shared determinants of recent HIV testing by subgroup included: older age (Odds Ratios [95% Confidence Intervals] for SW: 2.8 [1.6–5.0]; NSW: 2.3 [1.7–3.0]), ever contacted by peers/staff from a non-governmental/community-based organization (5.3 [1.6–32.8]; 1.9 [1.1–3.8]), prior pregnancy (1.8 [1.1–3.2]; 2.6 [1.8–3.6]), and recent STI treatment (6.2 [2.2–25.9]; 1.9 [1.3–3.0]). N=37/365 (10%) of YSW and N=30/828 (4%) NSW were living with HIV, of whom only 27% (N=10/37), and 30% (N=9/30) were diagnosed and aware ( $p = 0.79$  subgroup comparison).

**Conclusion** Shared determinants of testing suggest that reaching across high-risk AGYW via hotspot based strategies could fill gaps left by traditional HIV prevention and testing services.

**Disclosure** No significant relationships.