HIV/Sexual Health
Clinical Education Session


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Please contact may.wang@ashm.org.au for details.
Aim – To identify characteristics associated with delivering an infant with congenital syphilis and missed opportunities for prevention among syphilis-infected pregnant women in California.
TABLE 1: Characteristics of CS and Non-CS Mothers—California, 2012 to 2014

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Non-CS Mothers (n = 263), n (%)</th>
<th>CS Mothers (n = 184), n (%)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age at delivery, y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-19</td>
<td>15 (6)</td>
<td>10 (5)</td>
<td>0.386</td>
</tr>
<tr>
<td>20-29</td>
<td>148 (56)</td>
<td>83 (45)</td>
<td>0.370</td>
</tr>
<tr>
<td>24-39</td>
<td>89 (34)</td>
<td>61 (33)</td>
<td>0.480</td>
</tr>
<tr>
<td>40-45</td>
<td>11 (4)</td>
<td>8 (5)</td>
<td>0.735</td>
</tr>
<tr>
<td><strong>Education level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some high school or less</td>
<td>97 (37)</td>
<td>73 (40)</td>
<td>0.117</td>
</tr>
<tr>
<td>High school graduate or GED</td>
<td>70 (27)</td>
<td>40 (22)</td>
<td>0.961</td>
</tr>
<tr>
<td>Some college or more</td>
<td>76 (29)</td>
<td>24 (13)</td>
<td>0.006</td>
</tr>
<tr>
<td>Unknown</td>
<td>12 (5)</td>
<td>14 (8)</td>
<td>0.095</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>203 (77)</td>
<td>179 (98)</td>
<td>0.330</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>18 (7)</td>
<td>5 (3)</td>
<td>0.175</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>19 (7)</td>
<td>9 (5)</td>
<td>0.354</td>
</tr>
<tr>
<td>Native American/Alaskan Native</td>
<td>1 (1)</td>
<td>2 (1)</td>
<td>0.562</td>
</tr>
<tr>
<td>Other</td>
<td>9 (3)</td>
<td>8 (5)</td>
<td>0.454</td>
</tr>
<tr>
<td>Unknown</td>
<td>22 (9)</td>
<td>13 (8)</td>
<td>0.872</td>
</tr>
<tr>
<td><strong>Prenatal care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receipt of prenatal care before delivery</td>
<td>263 (100)</td>
<td>137 (100)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>4 wk postpartum</td>
<td>263 (100)</td>
<td>137 (100)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Time of first prenatal care visit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First</td>
<td>197 (75)</td>
<td>71 (40)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Second</td>
<td>61 (23)</td>
<td>36 (22)</td>
<td>0.766</td>
</tr>
<tr>
<td>Third</td>
<td>18 (5)</td>
<td>30 (13)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>No prenatal care</td>
<td>0 (0)</td>
<td>27 (16)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Source of payment for delivery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government program</td>
<td>103 (79)</td>
<td>118 (72)</td>
<td>0.602</td>
</tr>
<tr>
<td>Private insurance</td>
<td>64 (24)</td>
<td>15 (9)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Not enrolled in insurance*</td>
<td>14 (5)</td>
<td>29 (18)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Other or unknown</td>
<td>2 (1)</td>
<td>2 (1)</td>
<td>0.440</td>
</tr>
<tr>
<td><strong>Syphilitic testing and treatment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timing of first syphilis test before delivery</td>
<td>263 (100)</td>
<td>69 (43)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>4 wk or less</td>
<td>263 (100)</td>
<td>40 (25)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Not tested before delivery</td>
<td>0 (0)</td>
<td>48 (28)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td><strong>Stage of syphilis</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>3 (2)</td>
<td>0 (0)</td>
<td>0.162</td>
</tr>
<tr>
<td>Secondary</td>
<td>28 (11)</td>
<td>9 (5)</td>
<td>0.051</td>
</tr>
<tr>
<td>Early latent</td>
<td>40 (15)</td>
<td>36 (22)</td>
<td>0.078</td>
</tr>
<tr>
<td>Late latent</td>
<td>158 (60)</td>
<td>86 (48)</td>
<td>0.762</td>
</tr>
<tr>
<td>Latent, unknown duration</td>
<td>55 (21)</td>
<td>33 (18)</td>
<td>0.844</td>
</tr>
<tr>
<td>Acquired after clinical fatherhood</td>
<td>74 (28)</td>
<td>49 (27)</td>
<td>0.876</td>
</tr>
<tr>
<td>All late stages*</td>
<td>189 (72)</td>
<td>119 (72)</td>
<td>0.937</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adequate</td>
<td>263 (100)</td>
<td>6 (4)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Not treated before delivery</td>
<td>0 (0)</td>
<td>48 (28)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Began &lt;30 d before delivery</td>
<td>0 (0)</td>
<td>48 (28)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Inadequate barium syphilis or Nonpregnant therapy</td>
<td>263 (100)</td>
<td>6 (4)</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Queensland's worst outbreak of syphilis in 30 years rampant in state's north

Syphilis in north Queensland: Govt wants to stop babies dying by December 2017

Sixth infant dies from congenital syphilis amid outbreak in northern Queensland

Syphilis has returned to Queensland in epidemic proportions, and it's killing babies
Knowledge, practices, and barrier to HIV pre-exposure prophylaxis prescribing among Washington state medical providers

Brian R. Wood, MD, Vanessa M. McMahan, MS, Kelly Naismith, MPH, Jonathan B. Stockton, MHA, Lori A. Delaney, and Joanne D. Stekler, MD, MPH

- **Aim** – To assess HIV pre-exposure prophylaxis (PrEP) awareness and prescribing practices among Washington State medical providers from diverse professional disciplines and practice types.

- **Method** – In May 2016, an anonymous online survey was administered to licensed medical practitioners who provide primary, longitudinal, walk-in, emergency, obstetric, gynaecologic, sexually transmitted infection, or family planning care.
- Print material which reviews current guidelines
- Suitability for PrEP
- Online testing tools
- Access to specialist
Association between anorectal chlamydia and oroanal sex or saliva use as a lubricant for anal sex: a cross-sectional survey

Vincent J. Cornelisse, MBBS, FACHSHM; Christopher K. Fairley, PhD; Tim R.H. Read, PhD; David Lee, DPH; Sandra Walker, DPsych; Jane S. Hocking, PhD; Marcus Y. Chen, PhD; Catriona S. Bradshaw, PhD; and Eric P.F. Chow, PhD

Aim – To determine whether oroanal sex (rimming), fingering, or the use of saliva as anal lubricant are risk factors for anorectal chlamydia among men who have sex with men.

Cross sectional study conducted at MSHC from July 31, 2014 to June 30, 2015

CASI system was used to collect data on demographics and sexual practices

Anorectal chlamydia positivity was calculated as the number of positive NAAT results divided by the total number of tests. Univariable and multivariable logistic regression analyses were conducted to assess associations between anorectal chlamydia and different anal sex practices, and confounding factors including HIV status and known contact with chlamydia.

Results/sexual practice

<table>
<thead>
<tr>
<th>Table 1. Risk Factors for Anorectal Chlamydia Among MSM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. Individuals (N = 1691), n (%)</strong></td>
</tr>
<tr>
<td>Age, y</td>
</tr>
<tr>
<td>&lt;24</td>
</tr>
<tr>
<td>≥24</td>
</tr>
<tr>
<td>Receptive rimming</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Receptive fingering or penis dipping (with or without saliva)</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Use of partner’s saliva as a lubricant for receptive anal sex practices (including fingering and penis insertion)</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Condom use for RAI</td>
</tr>
<tr>
<td>Not always</td>
</tr>
<tr>
<td>Always/no RAI</td>
</tr>
<tr>
<td>No response</td>
</tr>
<tr>
<td>No. male partners</td>
</tr>
<tr>
<td>None</td>
</tr>
<tr>
<td>1–3</td>
</tr>
<tr>
<td>≥4</td>
</tr>
<tr>
<td>HIV positive</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Known contact with chlamydia</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

*Adjusted for the other listed sexual practices and for contact with chlamydia and for condom use for anal sex.

All data relates to the preceding 3 months.
Discussion

- A previous paper called the HIM study found receptive rimming and the use of saliva was a risk factor for rectal CT. with the data from this study and the HIM study the conclusion can be made that receptive rimming and the use of saliva is a weak risk factor for rectal CT.
- It is however a higher risk for rectal gonorrhoea, which fits with observations that chlamydia is uncommonly found in the pharynx but gonorrhoea is more commonly found in the oropharynx.

Limitations

- Conducted at one sexual health clinic
- Low response rate, only 41% of participants completing the survey
- All behavioural data was self reported – recall bias
- “Association = causation”
Observed treatment responses to short-course doxycycline therapy for rectal Lymphogranuloma Venereum (LGV) in MSM

Simons, Rebecca MRCP†; Candfield, Sophie MRCP†; French, Patrick FRCP†; White, John A. FRCP
London
Background

- LGV biovars of Chlamydia trachomatis have been recognised as a cause of proctitis in MSM since 1960’s
- Public Health England data shows a sharp increase since 2012 with diagnoses rising by 40% from 2014-2015
- Most LGV cases manifest as symptomatic proctitis however a large multicentre case finding showed higher rates (27%) of asymptomatic LGV in the UK
- This may in part be due to recent guidance change which suggests that in addition to MSM with proctitis all HIV+ MSM with rectal chlamydia should be tested for LGV regardless of symptoms
- Studies have showed efficacy of 98.5% with 21 days of doxycycline, but shorter courses were not considered.
- Evidence base for LGV treatment including its duration is limited
- **Aim:** help guide future treatment recommendations and dosing schedules for any controlled trial assessing LGV treatment efficacy

Method

- Retrospective case note review in 2 central London clinics with large cohorts of MSM between November 2012 – November 2016
- All MSM who tested positive for LGV DNA (PCR) were identified
- LGV testing was indicated when a patient had symptoms or were a contact of LGV or for HIV+ MSM as per BASHH guidelines
- Selected any patients where less than 21 days of doxycycline was used for initial treatment
- Data on demographics, HIV status, clinical presentation, duration of doxycycline treatment, other concurrent treatments provided and TOC results were collected
- **Excluded** patients in whom no TOC was performed or those given 21 days of doxycycline for initial treatment
Results

- 60 MSM who were treated initially with less than 21 days of doxycycline for rectal CT (83% prescribed 7 day course) that was subsequently confirmed as LGV infection.
- Median age was 38 years (25-57 years).
- 26 (44%) were white British, 23 (38%) were white other, 2 (3%) were black Caribbean, 2 (3%) were black other, 1 (2%) were black African, and 6 (10%) were of “other” ethnicity.
- 56 (93%) patients were HIV+.
- 30 (50%) patients were asymptomatic, with the rest having rectal or other symptoms.
- 59 (97%) had a negative test of cure for LGV at a median of 31 days (7-200 days).
- Reinfection as opposed to treatment failure was considered likely in the one tested positive.

Duration of treatment and comedication

- 50 (83%) had been prescribed 7-day courses of doxycycline initially, and 10 (17%) were treated initially with 14 days of doxycycline.
- 11 (18%) of 60 patients received azithromycin in addition to doxycycline.
- After confirmation of LGV, all were invited back to complete a 3-week course, and at this visit, a TOC rectal swab for CT was obtained.
- In the non azithromycin group, the median time to TOC from the start of initial doxycycline course was 28 days (range, 7–200 days); 47 (96%) of 49 had a negative TOC for CT.
- 11 (18%) of 60 patients were coadministered azithromycin. All 11 patients given azithromycin were given 7 days of doxycycline, and 11 (100%) had a negative TOC result at a median of 37 days (range, 13–162 days).
- Reasons for less than 21 days of doxycycline were:- Rectal CT + in asymptomatic patients, contacts, empirical treatment for urethral or rectal gonorrhoea, 14 days of doxycycline was given to some patients with proctitis with a planned review at 2 weeks, although patients did not always return for review at this time point.
Discussion

- Limited data on outcomes of less than 21 days of doxycycline for LGV
- This study shows efficacy in most cases with initial negative TOC in 59/60 patients
- Significant proportion were asymptomatic however even in those who were symptomatic shorter duration was effective
- Most of our patients were HIV positive, and this is likely to reflect sexual networks, sexual risk behaviour
- Rationale for prolonged treatment based on invasive and systemic nature of infection and symptomatic resolution (primarily in bubonic disease)
- Low proportion had received azithromycin as one clinic treated gonorrhoea with doxycycline and ceftriaxone so unable to determine if azithromycin had played a part in clearing LGV infection.
- Reducing the duration of doxycycline might mitigate doxycycline side effects and cost saving, role in antibiotic stewardship.

Discussion

- Limitations
- Retrospective review and not systematic.
- High proportion of asymptomatic patients seen than would be expected overall in individuals testing positive for LGV because these would have received 21 days of doxycycline so likely that these cases are skewed towards less severe infections.
- 2 clinics = reduced generalizability although majority of LGV is seen in MSM in London
- Co-medication such as azithromycin will have affected interpretation
- Establishing a cure at any time point from 3-8 weeks has limitations
Conclusion

- The clinical scenario of finding asymptomatic rectal CT in HIV+ MSM does not warrant a 3 week course of doxycycline. Suggest that a 1 week course followed by a TOC if LGV subsequently detected should be sufficient based on their experience.
- May remove the clinical imperative to perform costly LGV testing routinely in such a frequently detected infection as asymptomatic rectal CT in MSM.
- LGV typing has important results for LGV surveillance and partner notification
- Suggest a multicentre RCT comparing different durations of doxycycline.

Missed Opportunities for Human Immunodeficiency Virus and Syphilis Testing Among Men Who Have Sex With Men in China: A Cross-Sectional Study

**Background**

- MSM in China have disproportionately higher HIV and syphilis than others.
- Both infections are linked with sexual transmission
- MSM report higher numbers of partners compared with heterosexual males.
- Stigma and discrimination continue to affect health seeking behaviours of MSM resulting in limited screening.

**Aim**

- Describe the patterns of HIV and syphilis testing in Chinese MSM, and examine the factors which are associated with men who have never tested for HIV or syphilis, those who ever tested for HIV only and those who ever tested for both HIV and syphilis.
Method

- Online study among MSM in 2 provinces in China from July to August 2017
- Event notification containing a survey link sent to users through 'Blued' app.
- Eligibility criteria – Male, >16, OI or AI with another man during lifetime, consented to participate
- 2015 eligible men completed the survey
- Lifetime testing history of syphilis and/or HIV (yes/no)
- Demographic information
- Sexual History
- Level of community engagement in sexual health
- HIV stigma

Results

- Overall, 2105 men participated.
- Among them, 35.1% (738) never tested for HIV/syphilis, 31.3%. (685) had ever tested for HIV or syphilis and 33.7%(709) had ever tested for both HIV and syphilis.
- Men who had never tested for HIV or Syphilis compared with men who had tested for both were less likely to disclose their sexuality/sexual behaviours to others and to health professionals.
- Did not find stigma to be a significant mediator of the likelihood to test.
- Relative to men who had ever tested for both infections, those with increased probability of never testing for HIV/syphilis include:- non-gay sexual identity, not disclosed their sexuality/sexual history with men other than their regular partner or with health professionals, no condomless sex with casual partners in the last 3 months, no community engagement in sexual health, and mainly met partners offline
Discussion

- 1/3 of MSM had never tested for HIV/Syphilis
- Men who had never tested for HIV and syphilis were less likely to disclose their sexuality/sexual behaviors to others and health professionals.
- Did not find anticipated HIV stigma to be a mediator of the likelihood to test. It may be possible that other factors such as the perceived lack of confidentiality and the inconvenience of testing continue to drive MSM away from public clinics that offer free HIV and syphilis testing.
- Other significant factors affecting a man's testing history were non-gay sexual identity and lack of community engagement in sexual health.
- Together this suggests that a group of men that may be disconnected from the gay community and thereby, less likely to be impacted by public health campaigns aimed at the gay community in China.
- Further research is needed for example using discreet choice experiments to limit heterogenous preferences is needed to inform alternate strategies to promote HIV testing among this group.
- Men who mainly met partners offline and did not have condomless AI with casual partners were less likely to test for HIV and syphilis. This may reflect a group of men who perceive themselves as having less risk of being infected with an STI and thereby influencing their decision not to test.
- Campaigns should be directed at improving their sexual health knowledge. And advise for an annual comprehensive STI test for sexually active MSM.

Conclusions

Limitations
- Large sample size surveyed via app but may not be generalizable to all MSM in China
- Unsure if HIV and Syphilis testing were conducted at the same visit or separately
- For blood tests, self-reported testing may be an underestimate if a man was not aware of all the tests ordered by the clinician
- Social desirability bias may have influenced the result although this would be minimized from the anonymous nature of the survey

Considerations
- Despite policy changes in China to improve syphilis and HIV testing there remains a significant portion of MSM who have never tested for HIV or Syphilis.
- Missed opportunities for syphilis testing at the same time as HIV
- Integrate syphilis testing into current HIV testing structure
- Future for POC testing as technology develops
Patient Disengagement From an HIV Preexposure Prophylaxis Program in a Sexually Transmitted Disease Clinic

Dombrowski, Julia C. MD, MPH†‡; Golden, Matthew R. MD, MPH†‡; Barbee, Lindley A. MD, MPH†; Khosropour, Christine M. PhD, MPH‡

Background
- Sexual health clinics are key venues for linking patients to HIV PrEP at risk for HIV and these clinics provide care to patients who are disproportionately black, young, and uninsured.
- Effectiveness depends on adherence
- Reports indicate that retention in PrEP care may be suboptimal
- PrEP provision in many clinics is relatively new, the focus of reports on STD clinic programs have been based on patient interest in and initiation of PrEP.
- Less is known about ongoing management in PrEP care

Objective
- Evaluate patient disengagement from the PrEP program

Prep program
- PrEP program targets MSM and Transgender individuals who have sex with men at high risk for HIV according to Washington state guidelines
- Sexually transmitted disease clinicians and disease intervention specialists (DIS) refer patients who are interested in PrEP but do not meet the criteria are referred to other providers in the community.
- All clinicians can prescribe PrEP and the goal is same day prescription
- 2 DIS assist patients with the enrollment in payment assistance programs, schedule follow up appts at the time of each visit and attempt to contact and reschedule all those who miss appointments
- After enrolment, patients follow up at 1/12 and then every 3/12 with DIS.
- Clinicians see patients every 6/12 or as needed
- Opt in SMS support system receive automated reminders, monthly 2-way check in messages and the opportunity to initiate 2-way test communication with the coordinators.
Method

- Retrospective cohort analysis of MSM who completed at least one PrEP encounter during the period of October 2014 – December 2016
- Electronic data base
- Patients who do not complete a scheduled follow up visit and do not respond to 3 calls or text messages are classified as lost to follow up
- 'Disengagement' was classified as either failure to start PrEP after enrolling, discontinuation of PrEP after initiation, or loss to follow up.
- Excluded those known to have moved away or transferred care.

Analysis

- Determined the percentage of patients who disengaged and assessed the timing of discontinuation using Kaplan-Meier analysis
- Examined the differences by race/ethnicity and age in the prevalence of and reasons for disengagement (Chi squared test) and the timing of discontinuation (log rank test)
- To assess the extent to which patients in the PrEP program represent those at risk for HIV they compared PrEP patients with MSM newly diagnosed with HIV in King County 2011-2015 using Chi Squared test for race/ethnicity and t test for age
Results

Mean observation time was 12 months IQR 6-8 months
Total of 133 (43%) men disengaged from the PrEP program
52 (17% of the overall) never started PrEP
81 (32% of those who started) discontinued after starting

Results

Kaplan-Meier survival estimate

Proportion retained in PrEP Program

Number of patients: 307

Months after PrEP Start
0 3 6 9 12 15 18 21 24 30
0.00 0.25 0.50 0.75 1.00

Proportion retained in PrEP Program
3 mo 16% 6 mo 26% 9 mo 33% 12 mo 40%

Number of patients
307 230 175 131 101 73 43 24 13
Discussion

- Among 307 MSM in the PrEP program, 17% never filled their prescription, and 40% of those who started PrEP discontinued it at least once within 12 months.
- 17% non initiation was similar to another report of 19% noninitiation in 3 US cities
- 40% discontinuation in 12 months was similar to reports from San Francisco clinics, but somewhat higher than that reported at pharmacy-based program in Seattle (25% in 1 year) and an integrated health system in California (23% in 9 months).
- Higher discontinuation rates among STD clinic patients may reflect a higher risk population, or at least in this clinic, promotion of PrEP to persons who did not come to clinic specifically seeking PrEP and are ambivalent about it.

Conclusions

Limitations
- Generalizability of the study is limited because it included only one clinic recruiting high risk patients
- Unable to determine reasons for disengagement
- Did not independently assess ongoing risk among those who reported they were no longer at risk
- Prevalence of treatment limiting adverse effects is difficult to interpret due to missing data

Considerations
- Retention in PrEP programs is suboptimal
- Further information regarding reasons for discontinuation is required
- Discontinuation is appropriate for patients who are no longer at risk but patients may not accurately perceive their risk.
- Available data suggests that at least some portion of discontinuation is not attributable to decreased risk.
- Patients with STI's and drug or alcohol use are less likely to stay on PrEP and both younger age and black race are associated with drop-off of the PrEP care continuum.
- A better understanding of the relative contributions of health systems and patient factors to PrEP discontinuation is needed to inform the development of interventions to support PrEP engagement programs.