Sexual Health for Men who have Sex with Men

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Objectives

- Discuss issues contributing to increased STI risk among lesbian, gay, bisexual, transgender (LGBT) community
- Review STI and HIV epidemiology among men who have with men (MSM)
- Discuss guidelines for STI screening and most common STIs among MSM
- Discuss HIV pre-exposure prophylaxis (PrEP)
Life course perspective: Growing up and coming out

- **Sexual expression is happening earlier**
- Same sex behavior and gender non-conformity remains stigmatized in most societies
- Societal messages remind LGBT Youth they are not accepted (marriage pressure, exclusion from military)
- LGBT Youth may encounter loss of friends, lack of family support, religious abandonment, and verbal or physical abuse, resulting in adverse health outcomes
- External stigma may → internalized homophobia → depression, substance use

“Men who have sex with men” is an epidemiological term

Realy is more complex

ONE SIZE DOES NOT FIT ALL

Mental Health Issues

• 40% of MSM become depressed, 2X the lifetime rate of heterosexuals

• Predictors of major depression are: not having a partner, experiencing anti-gay threats or violence, non-identification as gay

• Panic disorder, social phobia, generalized anxiety disorder are more common among MSM (20% lifetime incidence)

• Culturally-tailored treatment may involve groups that enhance community identification

(Sandfort, Arch Gen Psych, 2001; Gilman, AJPH, 2001; Lewis, Health Place, 2010; Safren, Health Psychology, 2012)
Substance Use and MSM

- Substance use during sex is often associated with HIV and STD in MSM in many countries
- Common drug combinations associated with risk include: meth, cocaine, poppers
- May ↑ libido, sensation, sense of invulnerability, but impairs negotiation, associated with ↑ risky networks
- ↓ pain threshold → traumatic sex
- For HIV+ pts, SU may decrease medication adherence


Multifactorial Nature of STD Risk

- **Individual behavior**: number of partners/time
- **Biology**
  - Specific sex acts associated with different STD
  - Particularly, anal intercourse ↑ susceptibility to HIV, other STD
  - Role versatility: receptive can be insertive
- **Networks**
  - HIV/STD per contact risk ↑ in high prevalence settings
  - Assortative mixing in sub-groups, e.g. racial/ethnic minorities
  - Sexualized venues, e.g. bathhouses, social media, sex work
- **Structural/Societal**
  - Homophobia, bullying leads to early developmental stress, depression, lack of self-efficacy and subsequent risk
  - Criminalization and discrimination in health care settings impede disclosure and receipt of timely health services
STI Rates among MSM

Primary and Secondary Syphilis — Distribution of Cases by Sex and Sexual Behavior, 2015
Estimated New HIV Diagnoses Among the Most-Affected Subpopulations, 2014—United States

Incidence of Bacterial STIs and HIV Among MSM in King County, WA 2007-2015

* Assumes 5.7% men are MSM
Resilience in the Face of Stress?
Majority of MSM and other LGBT people are not infected or at increased risk

<table>
<thead>
<tr>
<th>No. of Psychosocial Health Problems</th>
<th>0 (n = 1,392)</th>
<th>1 (n = 812)</th>
<th>2 (n = 341)</th>
<th>3 or 4 (n = 129)</th>
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<tr>
<td>Recent high risk sex</td>
<td>7%</td>
<td>11%</td>
<td>16%</td>
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<tr>
<td>HIV prevalence</td>
<td>13%</td>
<td>21%</td>
<td>27%</td>
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All associations have p’s < 0.001. All p values are two-tailed.

From Stall et al., 2003

Epidemiology and Prevention

Unprotected Sex, Underestimated Risk, Undiagnosed HIV and Sexually Transmitted Diseases Among Men Who Have Sex With Men Accessing Testing Services in a New England Bathhouse

Prevalence

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<td>Syphilis</td>
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<td>GU GC</td>
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From Acquir Immune Defic Synd • Volume 59, Number 2, February 1, 2012
The following screening tests should be performed AT LEAST ANNUALLY for sexually active MSM, including those with HIV infection.

- **HIV serology**, if HIV status is unknown or negative and the patient himself or his sex partner(s) has had more than one sex partner since most recent HIV test.
- **Syphilis serology** to establish whether persons with reactive tests have untreated syphilis, have partially treated syphilis, are manifesting a slow serologic response to appropriate prior therapy, or are serofast.
STD Treatment Guidelines, 2015

- A test for urethral infection† with *N. gonorrhoeae* and *C. trachomatis* in MSM with history of insertive sex in the past year (testing of the urine using NAAT† is the preferred approach).

- A test for rectal infection with *N. gonorrhoeae* and *C. trachomatis* in MSM with history of receptive anal sex in the past year (NAAT of a rectal specimen is the preferred approach).

- A test for pharyngeal infection† with *N. gonorrhoeae* in MSM with history of receptive oral sex in the past year (NAAT of a pharyngeal specimen is the preferred approach). Testing for *C. trachomatis* pharyngeal infection is not recommended.

Gonorrhea Transmission in MSM

Fairley CK, et al. Emerging Infectious Diseases Volume 23, January 2017
Gonorrhea among MSM

In MSM, 3 sites are commonly infected:
- pharynx, rectum, and urethra
- In a Seattle clinic, the proportion of MSM with pharyngeal gonorrhea was 6.5%, rectal gonorrhea 9.7%, and urethral gonorrhea 5.5%.
- Almost all urethral infections were symptomatic (96%), but most pharyngeal and rectal infections were asymptomatic.
- Most pharyngeal or rectal infections (58%) were not associated with urethral infection.

Treatment: **Ceftriaxone** 250 mg IM in a single dose
PLUS **Azithromycin** 1 g orally in a single dose.

Lymphogranuloma venereum (LGV):
- Caused by *C. trachomatis* serovars L1, L2, L3
  - Primary stage – small, painless papule which may ulcerate; ulcer is transient
  - Secondary stage – occurs weeks after lesion; unilateral inguinal and/or femoral lymphadenopathy; “groove sign” in 10-20%;

- Rectal exposure in MSM can result in proctocolitis mimicking inflammatory bowel disease, with mucoid and/or hemorrhagic rectal discharge, anal pain, constipation, fever, and/or tenesmus.
- Outbreaks of LGV proctocolitis reported among MSM.
LGV Diagnosis and Treatment

- Patients presenting with proctocolitis should be tested with rectal NAATs (chlamydia). Additional molecular testing (PCR based genotyping) can be performed.

Criteria used in LGV diagnosis
- Complement fixation titers >1:64 can support diagnosis in the appropriate clinical context.
- Serologic test interpretation for LGV is not standardized.

- Clinical syndrome consistent with proctocolitis should receive presumptive treatment. In addition, if painful perianal ulcers or mucosal ulcers (anoscopy), give presumptive therapy for herpes.

- Treat with doxycycline or erythromycin for 21 days. Evaluate and treat sexual partners within 60 days.

HIV Pre-exposure Prophylaxis

Gay and bisexual men are standing up against HIV. We're staying strong and informed.
What is pre-exposure prophylaxis?

Use of antiretroviral medications **before** an exposure, to reduce the risk of becoming infected

**Tenofovir (TDF)** is the most studied agent for PrEP
- Once-daily dosing
- Few drug-drug interactions
- Safe and well tolerated

**FDA approved in 2012**
**USPHS guidelines in 2014**
(emtricitabine / tenofovir DF = Truvada)

When taken consistently, oral PrEP reduces risk of HIV infection by **90-100%**
- among cisgender MSM, heterosexual men & women, and transgender women.

(84% among PWID)

24.7% sexually active MSM = 492,000
18.5% of PWID = 115,000
0.4% of heterosexual adults = 624,000
Data derived from national probability surveys

PrEP has taken off in the US...

79,684 individuals

Rawlings K et al (McAllister presenting). IAC Durban 2016, abstract #TUAX0105LB
http://www.natap.org/2016/IAC/IAC_17.htm
...and it’s not reaching those most at risk

Use of FTC/TDF for PrEP 2012-2015

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<td>CA</td>
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Bush S et al. ASM / ICAAC 2016, abstract #2651

Mera R, et al. IAS2016, Durban, SA
PrEP Provider Training
NC AIDS Training Education Center

http://www.med.unc.edu/iamprepared

Current PrEP Service Gaps

NCATEC PrEP Provider Map
22 November 2016

No PrEP provider within 1 county radius
Can PrEP be delivered in NC’s HD clinics?

May 2016 – survey of all 85 NC local HDs

- 56 directors (66%) responded
  - 2 prescribing PrEP (now 4-5: Cabarrus, Orange, Surry, Wake ± Durham)
  - 7 externally refer, 11 considering services
- Main barriers among 47 without any services:
  - lack of local PrEP providers, lack of PrEP awareness, perceived lack of PrEP candidates
- Needs assessment for training/support:
  - Help identifying clients, prescribing & mgm’t, outreach and educational materials for clients

Zhang, Rhea, Fleischauer, Hurt, Mobley, Seña, Swygard, McKellar. Unpublished data.

Blended Implementation Model:
Durham County Department of Public Health
Steps to PrEP in Durham

- CONVENED PrEP Task Force in 2014 with NC HIV/STD Branch and key partners
- OBTAINED approval from local Health Director and Board of Health to integrate services in STD clinic
- DEVELOPED clinic procedures for priority groups, baseline testing and follow-up
- DISCUSSED logistics of referrals between clinic staff and prescribing providers
- CREATED referral packet with PrEP brochure, drug assistance form, reminders
- DISSEMINATED information through CBOs and community-wide efforts (e.g. bus ads)

Approximately 57% have initiated PrEP. 37% have been retained on PrEP over 3-6 months.


- 125 evaluated and referred
  - 26% Partners to HIV+
  - 85% High risk MSM
  - 10% Women
  - 5% Transgender

Approximately 57% have initiated PrEP.
37% have been retained on PrEP over 3-6 months
Overall STI incidence (90/100 person years) remained stable during follow-up (P>0.1) (Liu, Cohen, JAMA Int Med, 2015)

United Kingdom GU Med Clinics: PROUD Study

- Significantly fewer new HIV infections with immediate versus deferred PrEP (3 versus 19 cases)
  - 86% reduction (P=0.0002)
  - Number needed to treat to prevent 1 infection: 13
- HIV post exposure prophylaxis (PEP) used by 31% in deferred arm
- Risk behaviors were similar between the 2 arms

Summary

• The MSM population is diverse and risks will vary greatly.
• MSM similar health concerns as others, but some are at increased risk for STIs because of biological, behavioral, social/structural issues.
• MSM continue to be affected by high rates of gonorrhea, chlamydia, syphilis and HIV.
• STD screening should be annual, conduct oral and rectal testing for gonorrhea and chlamydia.
• PrEP offer new opportunities to engage at risk persons and providers in STD diagnosis and disease control.

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