Transgender People and HIV

Asa Radix, MD, MPH
Callen-Lorde Community Health Center
Continuing Medical Education Disclosure

- **Program Faculty**: Asa Radix, MD, MPH
- **Current Position**: Director of Research and Education, Callen-Lorde Community Health Center
- **Disclosure**: No relevant financial relationships. All hormone therapy for transgender people is off-label.

It is the policy of The National LGBT Health Education Center, Fenway Health that all CME planning committee/faculty/authors/editors/staff disclose relationships with commercial entities upon nomination/invitation of participation. Disclosure documents are reviewed for potential conflicts of interest and, if identified, they are resolved prior to confirmation of participation. Only participants who have no conflict of interest or who agree to an identified resolution process prior to their participation were involved in this CME activity.
Learning Objectives

- After attending this presentation, learners will be able to:
  - Be aware of the epidemiology of HIV among transgender individuals
  - Know the social context and challenges to the care of transgender clients
  - Understand strategies to incorporate trans competent healthcare into your practice
Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents

Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People

The World Professional Association for Transgender Health
Description

- 25 year-old transgender woman with “sores” in the genital area
- She underwent vaginoplasty surgery 6 months prior
  - Started having sex 3 months after surgery
  - Condomless receptive anal and vaginal sex
  - All sexual partners have been cisgender men
- Meds:
  - Estradiol 2mg daily
Medical
- Healthy
- Past silicone use (breasts, hips)
- Gender affirming surgery (vaginoplasty)

Social
- Medical assistant
- Estranged from family; single
- Smokes ½ PPD, marijuana 2x/wk, 1 beer 3x/wk; denies other substance use

HIV test negative 6 months ago (pre-op)
Question 1

- How do you approach STI screening after gender affirming surgery (vaginoplasty, phalloplasty, metoidioplasty)
- What do you advise regarding cancer screening after these surgeries?
- What are best practices for obtaining sexual health histories in TGNB individuals
Description

- Neovaginal exam
  - Vesicular lesions on neolabia
- Diagnosis
  - Herpes simplex (confirmed by culture)
- Tested: vaginal, anal, & oral GC & CT (NAAT)
- Rapid point-of-care 4th gen HIV test (positive)

HIV/STI Risk Assessment

- Pronouns*: What are your pronouns?
- Parts*: What words do you prefer to use for your body parts? What bottom surgeries have you had?
- Partners: What are the genders of your partners? How many partners in the last 3 months?
- Practices: What kinds of sex are you having? Which behaviors might expose you to your partners’ fluids?
- Protection from STIs: How do you protect yourself against HIV and STIs?
- Pregnancy: Discuss contraceptive needs, fertility options
- Past history of STIs
## Anatomic Inventory/Surgeries

- Breasts
- Cervix
- Ovaries
- Penis
- Prostate
- Testes
- Uterus
- Vagina

- Bilateral breast augmentation
- Bilateral orchiectomy
- Forehead reconstruction
- Laryngeal feminization surgery
- Reduction thyrochondroplasty
- Scalp advancement
- Vaginoplasty, penile inversion
- Vaginoplasty, colon graft
- Bilateral total reduction mammoplasty
- Metoidioplasty
- Phalloplasty
- Scrotoplasty
- Urethroplasty
- Soft tissue filler injections
- Voice surgery
- Other unlisted surgical procedure
Sexual Health Examinations

- Defer unnecessary questions and exams
- Build rapport before performing genital exams
- Avoid satisfying your curiosity (i.e., do you really need to know/see?)
- Always explain the purpose of the exam
- Use gender neutral terms, ask patients what words they prefer
- Acknowledge barriers and offer solutions
STI Screening

- Always take an anatomic inventory
  - What surgeries were done?
  - What organs are still present?

- Vaginoplasty
  - Speculum exam
  - Screen neovagina with swab

- Metoidioplasty/Phalloplasty
  - Ask if vaginectomy was done
  - Urethral lengthening – urine NAAT not effective
Description

- 38 year old white transgender man presents for nPEP
- Condomless sex with cis-man 2 days prior, met on Grindr
- PSH: Metoidioplasty in Serbia 5 years prior
- Top surgery age 24
- PMH:
  - Meds: testosterone cypionate im
  - LMP >10 years ago
  - He has been hooking up with cisgender men regularly, intermittent condom use for sex
Question 2

- What are some of the factors that increase HIV risk among trans and gender non-binary people?
- How would you counsel him regarding sexual health, fertility, HIV?
- Does the fact that he is on testosterone affect these discussions?
What’s different about Transgender Patients?

Dept. of Health & Human Services, Office of Health Equity, recognizes LGBT people as 1 of the 9 socially disadvantaged and underserved populations

Trans People experience high rates of stigma

- **Trauma**
  - Public harassment: ≈50% – 60%
  - Physical violence: ≈25% – 50%

- **Legal**
  - Challenges with identity documents
  - Disproportionate rates of incarceration

- **Economic**
  - Unemployment associated with increased risk for homelessness, incarceration, sex work, drug use, HIV, and suicide attempts

146 documented murders of trans people in the USA 2008-2016

## Negative Experiences in Healthcare

<table>
<thead>
<tr>
<th>Experience</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had to teach their provider about transgender people</td>
<td>24%</td>
</tr>
<tr>
<td>Asked unnecessary or invasive questions about transgender status</td>
<td>15%</td>
</tr>
<tr>
<td>Refused transition related care</td>
<td>8%</td>
</tr>
<tr>
<td>Verbally harassed in healthcare setting</td>
<td>6%</td>
</tr>
<tr>
<td>Refused non-transition related care</td>
<td>3%</td>
</tr>
<tr>
<td>Provider physically rough or abusive</td>
<td>2%</td>
</tr>
<tr>
<td>Physically attacked by someone during visit</td>
<td>1%</td>
</tr>
<tr>
<td>Sexually assaulted in a health care setting</td>
<td>1%</td>
</tr>
<tr>
<td>One or more experiences listed</td>
<td>33%</td>
</tr>
</tbody>
</table>

USTS 2017
# Negative Experiences in Healthcare

<table>
<thead>
<tr>
<th>Experience</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had to teach their provider about transgender people</td>
<td>24%</td>
</tr>
<tr>
<td>Asked unnecessary or invasive questions about transgender status</td>
<td>15%</td>
</tr>
<tr>
<td>Refused transition related care</td>
<td>8%</td>
</tr>
<tr>
<td>Verbally harassed in healthcare setting</td>
<td>6%</td>
</tr>
<tr>
<td>Refused non-transition related care</td>
<td>3%</td>
</tr>
<tr>
<td>Provider physically rough or abusive</td>
<td>2%</td>
</tr>
<tr>
<td>Physically attacked by someone during visit</td>
<td>1%</td>
</tr>
<tr>
<td>Sexually assaulted in a health care setting</td>
<td>1%</td>
</tr>
<tr>
<td>One or more experiences listed</td>
<td>33%</td>
</tr>
<tr>
<td>Experience</td>
<td>Percentage</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Had to teach their provider about transgender people</td>
<td>24%</td>
</tr>
<tr>
<td>Asked unnecessary or invasive questions about transgender status</td>
<td>15%</td>
</tr>
<tr>
<td>Refused transition related care</td>
<td>8%</td>
</tr>
<tr>
<td>Verbally harassed in healthcare setting</td>
<td>6%</td>
</tr>
<tr>
<td>Refused non-transition related care</td>
<td>3%</td>
</tr>
<tr>
<td>Provider physically rough or abusive</td>
<td>2%</td>
</tr>
<tr>
<td>Physically attacked by someone during visit</td>
<td>1%</td>
</tr>
<tr>
<td>Sexually assaulted in a health care setting</td>
<td>1%</td>
</tr>
<tr>
<td>One or more experiences listed</td>
<td>33%</td>
</tr>
</tbody>
</table>
Stigma and Discrimination Can Lead to Health Disparities for Transgender People

MINORITY STRESS PROCESSES IN LESBIAN, GAY, AND BISEXUAL POPULATIONS

a. Circumstances in the Environment
b. Minority Status
   sexual orientation
   race/ethnicity
   gender
c. General Stressors
d. Minority Stress Processes (distal)
   prejudice events
   (discrimination, violence)
e. Minority Identity
   (gay, lesbian, bisexual)
f. Minority Stress Processes (proximal)
   expectations of rejection
   concealment
   internalized homophobia
g. Characteristics of Minority Identity
   prominence valence
   integration

h. Coping and Social Support
   (community and individual)
i. Mental Health
   Outcomes
   negative
   positive

KEY

Overlapping boxes represent interdependency

Indicates Outcome

Augments or Weakens Impact

Final Outcome


Medical Barriers for Transgender People

- Anticipate discrimination in health care
  - 52% fear they will be refused care
  - 73% worry they will be treated differently

- Delay getting health care due to experiences of discrimination
  - 23% did not see health care because of fear of being mistreated
  - 28% delayed care when ill or injured
  - 33% delayed or did not try to get preventive care

3. 2015 US Transgender Survey, National Center for Transgender Equality
Multilevel Drivers of HIV Risk Among Transgender Populations

Source: Adapted from T. Poteat, et. al., Global Epidemiology of HIV Infection and Related Syndemics Affecting Transgender People, JAIDS Vol. 72, Supp. 3, August 15, 2016
Factors Linked to HIV Risk among TGW

- **Individual**
  - High rates of sex work (>40%)
  - Lower rates condom use (financial, primary partner)
  - Needle sharing for hormones/silicone?

- **Biological**
  - Anal receptive sex
  - Neovaginal sex? Penile inversion vs. sigmoid colon loop
  - Impact of estrogens? (Increased expression of TH1-associated chemokine receptors, CCR1, CXCR3, and CCR5)

- **Increased rates of STIs**
  - Syphilis, HPV, Hepatitis B & C, HSV, chlamydia

Special Concerns for Trans Men

- **Individual**
  - 26% transgender men start having sex with cis men after initiation of hormones
  - High rates of condomless anal/frontal sex
  - Substance use during sex
  - Sex work

- **Biological**
  - Testosterone $\rightarrow$ atrophic vaginitis

(Herbst, 2008; Conare, 1997; Kenagy, 2002; Reisner, 2010; Rowniak, 2011)
Other Factors Linked to HIV Risk

- Non-inclusion in STI/HIV campaigns
- Sexual networks
- HIV prevention is a low priority
  - Safety, survival, emotional
  - Gender validation

Schulden, Pub Health Rep, 2008; CDC 2007; Nuttbrock AJPH 2011; Harawa 2005; Operario 2010;
Transgender Persons & HIV
HIV Infections Among Transgender People in the US

- HIV prevalence in trans women 22%
- Among the 9.4 million HIV testing events in 2009–2011, the percentage of transgender women with a new HIV diagnosis was >3 times the national average
  - 2.7% trans women
  - 0.9% cis men
  - 0.5% trans men
  - 0.2% cis women

Transgender women who have sex with men have the highest HIV burden of any key population

High Risk of HIV Infection for Some Transgender Men

- HIV prevalence estimates range from 0% to 4%.
- Transgender men who have sex with men (MSM) may have a particularly high risk of HIV.

People in the United States by Race/Ethnicity, 2009-2014

Transgender Men (N=361)
- Black/African American: 58% (211)
- Hispanic/Latino: 15% (55)
- White: 16% (56)
- Other: 11% (39)

Transgender Women (N=1,974)
- Black/African American: 51% (1,002)
- Hispanic/Latino: 29% (578)
- White: 11% (212)
- Other: 9% (182)

HIV Transmission Risk

92%

Sexual 5%
IDU 2%
Sexual + IDU 1%
Perinatal 0%
Other

Transgender Persons & HIV Care Continuum
Description

- 25 y/o transgender woman, recently diagnosed with HIV after developing genital herpes. Initial CD4 450, viral load 65,000
- She arrives 1-hour late to the initial HIV intake appointment
- After discussion of treatment options she opts not to initiate ART
- “I feel well”
Question 2

- What barriers to HIV care & treatment might exist for trans people?
- Why might transgender people be reluctant to initiate ART?
- What strategies can providers use to engage trans people in HIV care?
HIV Care Continuum Outcomes, 2015, USA

Receipt of medical care was defined as ≥1 test (CD4 or VL) in 2015. Retained in continuous medical care was defined as ≥2 tests (CD4 or VL) ≥3 months apart in 2015. Viral suppression was defined as <200 copies/mL on the most recent VL test in 2015.
HIV Testing

- Only 36% of transgender women and men surveyed by the BRFSS in 2014 and 2015 reported ever testing for HIV compared with 62% of cisgender gay and bisexual men.

- Diagnosis: nearly 12% of transgender women self-reported HIV diagnosis; almost 28% tested positive for HIV.

Barriers to Treatment

- **Transgender Women**
  - **Less likely** to receive ART than a nontransgender person (59% vs. 82%)
  - **More likely** to report lower adherence 51.5% vs. 68.4% (p<0.05)
    - Detectable HIV VL (63.6% vs. 52.4%)
  - 65% on ART, 44% VL undetectable (San Francisco 2010)
  - Higher HIV-related mortality

(Melendez et al, APJH 2005; Sevelius et al, JANAC, 2010; San Francisco DPH HIV/AIDS Epidemiology Annual Report, 2008)
Transgender Adults and Adolescents Served by RWHAP, 2016

Total Transgender Population, N=7166 (1.3%)

Retention in Care

<table>
<thead>
<tr>
<th>Group</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cis men</td>
<td>81</td>
</tr>
<tr>
<td>Cis women</td>
<td>83.7</td>
</tr>
<tr>
<td>Transgender men</td>
<td>78.9</td>
</tr>
<tr>
<td>Transgender</td>
<td>79.8</td>
</tr>
</tbody>
</table>

Viral Suppression

<table>
<thead>
<tr>
<th>Group</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cis men</td>
<td>85.4</td>
</tr>
<tr>
<td>Cis women</td>
<td>84</td>
</tr>
<tr>
<td>Transgender men</td>
<td>84.1</td>
</tr>
<tr>
<td>Transgender women</td>
<td>79.0</td>
</tr>
</tbody>
</table>

Viral Suppression among Transgender People (RWHAP 2016)

Viral suppression has increased (80%)

But age/race/other disparities still exist:

- 20–24 years (63.8%) and 25–29 years (71.4%)
- Black/African American trans people (75%)
- No health care coverage (74.3%)
- Unstable housing (67.1%).
Top 5 health concerns of HIV+ trans people (N=157 surveyed)

1. Gender-affirming and non-discriminatory care (59%)
2. Hormone therapy and side effects (53%)
3. Mental health care, including trauma (49%)
4. Personal care, eg, nutrition (47%)
5. ART and side effects (46%)

What can providers do?

- Ask about adherence
  - “How has it been going taking your medicines?”
  - “What seems to get in the way of you taking your medicines, keeping appointments?”
- Address other needs
  - Housing
  - Employment
  - Behavioral health needs
  - Legal assistance
Description

- 26 y/o transgender woman, recent admission to hospital with PCP. She was diagnosed with HIV two years prior however opted not to initiate ART.
- She was started on ART while in hospital, discharged with dolutegravir, emtricitabine/tenofovir, continues on trimethoprim-sulfamethoxazole tablets.
- She expresses to you that she isn’t happy about taking all these pills.
Question 3

- What are the considerations (if any) related to hormone therapy and antiretroviral treatment?
- What individual & structural factors might affect viral suppression rates for transgender people?
- How do we best support adherence to ART?
## Hormones and ART

<table>
<thead>
<tr>
<th>Gender-Affirming Hormone Therapy</th>
<th>All PIs</th>
<th>↓ estradiol possible</th>
<th>Adjust estradiol dosage as needed based on clinical effects and endogenous hormone concentrations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>All PIs</td>
<td>↔ finasteride, goserelin, leuprolide acetate, and spironolactone expected</td>
<td>No dose adjustment necessary.</td>
<td></td>
</tr>
<tr>
<td>All PIs</td>
<td>↑ dutasteride possible</td>
<td>Adjust dutasteride dosage as needed based on clinical effects and endogenous hormone concentrations.</td>
<td></td>
</tr>
<tr>
<td>All PIs</td>
<td>↓ testosterone possible</td>
<td>Adjust testosterone dosage as needed based on clinical effects and endogenous hormone concentrations.</td>
<td></td>
</tr>
</tbody>
</table>
Hormones and ART

• Data based on studies with oral contraceptives (ethinyl estradiol)
• Estrogens metabolized by cyp3A4
• PI, NNRTI, cobicistat interactions possible
  - Avoid using unboosted fosamprenavir with estrogens – APV C min 20%
  - Monitor estradiol levels 2 weeks after ARV change if potential for interaction
• Tenofovir levels in the blood were reduced by 13% in trans women receiving feminizing hormones
• Estradiol levels unchanged

Radix A et al. JIAS 2016, 19(Suppl 2):20810;
Hiransuthikul A et al. 22nd International AIDS Conference (AIDS 2018), Amsterdam, abstract TUPDX0107LB, 2018
Hormones & ART

• Forgoing ART due to fear of drug-drug interactions
• Cross-sectional study in LA (n=87)
  - Only half of transgender women discussed hormone-ART DDIs with provider
  - 40% reported not taking ART (12%), HT (12%), or both (16%) as directed due to DDI concerns

Braun HM et al. LGBT Health. 2017
Laboratory Monitoring

- In addition to HIV labs (T-lymphocytes, HIV RNA, LFTS)
  - Baseline testosterone level (bioavailable, morning)
  - Estradiol levels 1-2 weeks after initiating and changing ARVs (measure midway between injections)
Long term Health Considerations
Question 4

- What would you tell this patient about additional health concerns for trans people living with HIV?
- What preventive care interventions should you be considering?
- How do you apply gender based screening guidelines to trans people who are using hormones/have had GAS?
Preventive Care

- Reassure patients that ART safe with hormones
- Tobacco cessation
- “if you have it, check it” screen organs that are present
- STI screenings (+extragenital)
- Vaccinations – Hep A/B, HPV, meningococcal
- Screening for osteoporosis (DXA) at age 50
- Consider quality of referrals, peer navigation
Culture Walks

- From registration to exit
- Inclusive forms
- Trans inclusive materials
- Staff
- Restrooms
- Non-discrimination policies
- Employee benefits
- Honoring TDOR, TDOV
RESOURCES


RESOURCES

Fenway Health
www.fenwayhealth.org

Callen-Lorde Community Health Center
http://callen-lorde.org/transhealth/

UCSF COE Transgender Health
http://transhealth.ucsf.edu/

Acknowledgments: Dr. Tonia Poteat

@aeradix
@callen-lorde